The RUBBER AGE

Published TWICE-A-MONTH at New York

Vol. 20 October 25, 1926 No. 2

R. T. VANDERBILT CO.

INCORPORATED

50 East 42nd Street, New York

Compounding with CAPTAX Accelerator

Sheets are now ready for distribution showing the approximate percentage of Captax desirable in a wide variety of compounds with time and temperature of cure and results of tests covering nearly all classes of rubber goods.

A study of these sheets may save much preliminary compounding.

For range of cure and uniformity consider Captax.

WAREHOUSES:

AKRON
Union Terminal Warehouse
East South & Brooks Sts.

BOSTON
Francis Fitz Company
30 Pittsburgh St.

CHICAGO
Midland Warehouse & Transfer Co.
43rd & Robey Sts.

SAN FRANCISCO
Haslett Warehouse Co.
60 California St.

TORONTO
Toronto Storage Co.
17 River St.

TRENTON
Anchor Warehouse Co.
N. Y. & Olden Ave.

45th Year

R&H for Rubber

REG. U.S. PAT. OFF.

CHEMICALS AND SERVICE

YOUR vulcanizing processes react satisfactorily only when human skill is reinforced by high quality chemicals. There is everything to lose and little to gain by employing materials of other standards.

The policy of R & H as to the quality of its rubber chemicals is well known. No shipment is allowed to leave our plants that will disturb our reputation for dependability. Use R & H Chemicals to secure the highest type of results.

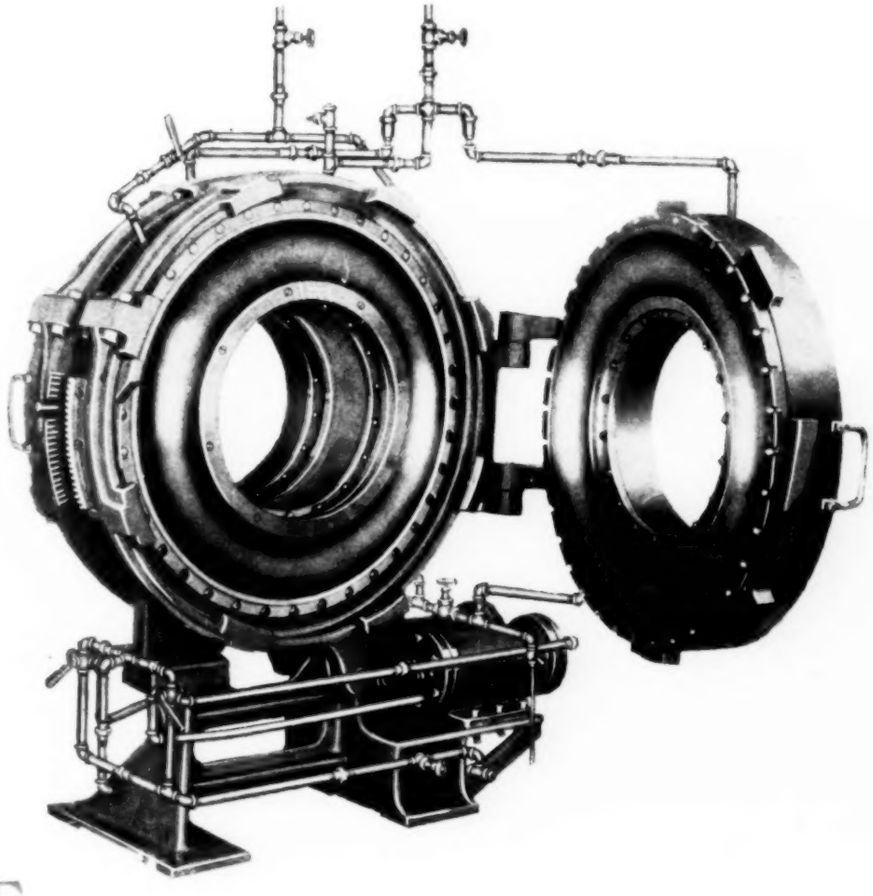
Also make use of the complete R & H Service for rubber manufacturers. Our technical staff represents the most advanced thought in the conduct of vulcanization processes. The experience and knowledge of this staff are valuable when your processes must be changed or improved.

R & H Accelerators — for any purpose

The ROESSLER & HASSLACHER CHEMICAL CO.

709 Sixth Avenue New York

Saves The Minutes In Tube Vulcanizing, Too



THIS Akron Standard Automatic Vulcanizer—already famous for its unequaled advantages in the curing of tires—has also established its superiority in curing full molded tubes. On all sizes—29x4.40 and up—perfect results are being obtained and the production cost per tube is cheaper than with any other molded tube method on the market today.

Write for details and prices

The Akron Standard Mold Co.

Akron "The Established Measure of Value" **Ohio**

The RUBBER AGE

Published Twice-a-Month by

The PALMERTON PUBLISHING CO., Inc.

225 Fourth Ave., N. Y. City

P. L. Palmerton, *President*

P. L. PALMERTON, *Editor*

PETER P. PINTO, *Business Manager*

Vol. 20 OCTOBER 25, 1926 No. 2

Index to Contents

NEWS SECTION

Tire Dealers' Stocks Are Low 59
Spring Dating Policy Announced 59
Rubber Exchange Makes Report 60
Rims Inspected in September 60
Tire Impact Study Results 61
Lost Persons Interest Rubber Companies 61
August Tire Output Sets Record 62
Tire Plants Have High Accident Rate 62
Tire Builders To Organize Unions 63
Survey of Rubber Footwear Industry 65
Rubber Imports Up in September 65
New Factory Equipment 71
Crude Rubber News 83
Rubber Chemical News 87
Cotton and Tire Fabric News 90

FEATURES and DEPARTMENTS

Editorial Comment 73
The New Rubber Footwear Season 75
The Industrial Traffic Department 77
Where and How of The Wickham Expedition 78
World Trade in Mechanical Goods 79
The London Letter 81

MARKETS and STATISTICS

Statistics 93
Cotton and Fabric Market 91
Crude, Scrap and Reclaimed Rubber 84
Chemicals and Compounding Materials 89

ADVERTISING INDEX .....Page 101
MARKET PLACE LISTINGS .....Pages 92, 94, 96, 98

Published on the 10th and 25th of each month by Palmerton Publishing Co., 225 Fourth Ave., N. Y. C. and Highland, N. Y. Address correspondence to N. Y. office. Subscription rates: Domestic, $2.00; Canada, $2.50; Foreign, $3.00. Single Copies, 10c.

Entered as Second Class Matter, June 10, 1920, at the Post Office at Highland, N. Y. under Act of March 3, 1879. Forms close 10 days before publication. If advertising proofs are desired, two weeks should be allowed. Advertising rates on application.

Contents Copyrighted 1926 by The Palmerton Publishing Co., Inc.

With the Editor

Because there is always the greatest interest in "straight news", that is, in the plain report of what is happening in the industry, it is regularly given emphasis in this journal. An added reason for such a policy is the fact that THE RUBBER AGE appears twice each month, just twice as often as any other rubber journal in the country, and therefore has an opportunity to present news before time has dimmed the industry's interest in it. There is of course a real importance to the prompt receipt of news. Every issue brings news that affects the policies of rubber companies. As example, this week we see stories of a tire dealer stock report, of the adoption of a spring dating policy, and of an attempt to unionize rubber factory workers in Akron. There is also an intriguing relationship between items. For instance, while the effort to unionize Akron tire builders is underway there comes a Census Bureau report that Akron wages are among the highest in the country!

Most feature stories are merely news which has been analyzed. This week the new rubber footwear season is discussed and it is shown that what was recently an innovation in that field is becoming regular practice. The London Letter is of course essentially a news feature.

Announcing

THIONEX

Tetramethylthiurammonosulfide, the safe Ultra Accelerator

Unexcelled for white and light colored stocks

A STABLE and non-toxic powder. Has much less tendency to cause scorching than any other accelerator of comparable activity. Write for further details on this new ultra accelerator.

E. I. du Pont de Nemours & Co., Inc.,
Dyestuffs Department, Sales Division,
WILMINGTON, DELAWARE
8 Thomas Street, New York, N. Y.

Vulcanization DU PONT **Accelerators**

PARA-FLUX

(Reg. U. S. Patent Office

A Universal Softener

for

TIRES; MECHANICALS
FRICTION TAPE; RECLAIMS, ETC.

PARA-FLUX
Uniformity—Within Range of Laboratory Error

PARA-FLUX
Increases Tensile Strength and Ageing Qualities

PARA-FLUX
Increases Abrasive Resistance

PARA-FLUX
Is the Most Economical High Grade Softener

PARA-FLUX
Is an Anti-Oxidant

THE C. P. HALL CO.

Manufacturers Agents

RAW MATERIALS

118 Central Savings & Trust Bldg.
AKRON, OHIO

When You Buy From Us You Are Dealing Direct

OCT 26'26

©Cl B713114

The
RUBBER AGE
The Only Twice-a-Month Rubber Publication

VOL. 20 | NEW YORK, OCTOBER 25, 1926 | No. 2

TIRE DEALERS' STOCKS LOW, SURVEY REVEALS

Average Dealer Holds But 48 Casings As Compared With 56.6 At Same Time Last Year, According to Survey of the Rubber Division, Department of Commerce.

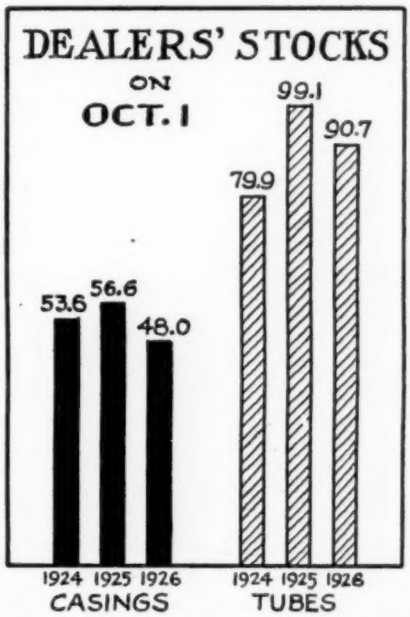
According to the semi-annual survey of tire dealers' stocks, taken on the first of each April and October, by the Rubber Division of the Department of Commerce, the average tire dealer throughout the United States had an abnormally low number of tires on hand on October 1. The average number of casings is reported at exactly 48. A year ago the report showed the average stock to be 56.6 tires while at the same time in 1924 the average stock stood at 53.6 casings.

The average stock of automobile inner tubes is also lower than was the case one year ago, although it is higher than in 1924. On October 1 this year, the Rubber Division's report shows, the average dealer held 90.7 tubes as compared with 99.1 a year ago and 79.9 in 1924.

If one accepts 100,000 as the number of tire dealers in the country, a figure commonly used by statisticians, it will be seen that on October 1 dealers held 860,000 casings and 840,000 inner tubes less than they held a year ago. Such a condition is all the more striking when it is considered that on account of the larger number of automobiles in use an increase in dealers' stocks would be justified. That dealers' stocks are so low is naturally indicative of good sales possibilities for tire manufacturers.

The Rubber Division announces that while the results published so far are preliminary and to be followed by a much more comprehensive report at the end of the month, there has never been any considerable change in the average stock after the first report is written.

The number of dealers handling balloon tires and the average number of such tires per dealer have both increased. However, balloon tires now constitute only 25 per cent of all the tires in dealers' hands and the reduction in stocks



can scarcely be credited to standardization. Detailed figures follow:

TIRE DEALERS' STOCKS

	Oct. 1, 1926		Oct. 1, 1925		Oct. 1, 1924	
	Dealers Heard From	Average per Dealer	Dealers Heard From	Average per Dealer	Dealers Heard From	Average per Dealer
All casings	29,503	48.0	35,331	56.6	26,161	53.6
Balloons (alone)	18,393	20.3	16,240	17.5	7,237	14.5
Inner tubes	29,117	90.7	35,163	99.1	27,480	79.9
Solid and Cushion	1,548	21.5	2,122	25.0	1,449*	21.1*

*Solid tires only.

The Rubber Division has offered the following analysis classifying the dealers according to volume of stock in order to show that in this year's survey reports were received from small and large dealers in about the same proportion as in previous surveys:

DEALERS CLASSIFIED BY VOLUME OF STOCK

No. of Casings	Per Cent of Total Dealers Reporting		
	Oct. 1, 1926	Oct. 1, 1925	Oct. 1, 1924
Less than 10	24.95	22.63	23.19
From 10 to 25	32.30	29.88	32.11
From 26 to 50	20.88	21.23	22.65
From 51 to 100	12.77	14.79	13.70
From 101 to 200	5.80	7.02	5.49
From 201 to 300	1.51	1.99	1.44
From 301 to 400	.67	.83	.52
From 401 to 1,000	.83	1.24	.64
Above 1,000	.29	.39	.26
Total	100.00	100.00	100.00

SPRING DATING WILL BEGIN NOVEMBER 15

Rubber Association Committee Designates Middle of November as Time for First Solicitation and Shipment of Spring Dating Business—Different in 1925.

Tire manufacturers will begin the solicitation of spring dating business on November 15. Shipments of orders taken on spring dating terms may begin also on that date if any manufacturer desires. Otherwise, spring dating practice returns to the status it held before it was revised last year on account of the crude rubber situation.

The above announcement of policy, to which the entire American tire industry is expected generally to adhere, followed a meeting of the Tire Executive Committee of the Rubber Association of America, Inc., in New York on October 15. The decision followed the report of a sub-committee which had been appointed to make recommendations for the Tire Executive Committee to consider.

It was generally expected that the committee would finally approve a later date for the first solicitation of spring dating business than had been selected in 1924 and earlier years. At that time October 15 or November 1 was the date usually decided upon, and it had been recognized that a later date would likely be more appropriate.

Last year the situation was controlled entirely by the soaring price of crude rubber. Manufacturers felt that their greatest advantage lay in relieving the market tension as much as possible and they accordingly undertook to carry on through the winter without resorting to selling on spring dating terms. The results are clearly visible in the lowered crude rubber consumption during the last three months of 1925. At the opening of 1926 it was apparent that tire manufacturers were in need of the usual spring dating outlet for the tires which are normally manufactured in the winter against spring demand. The result was a re-opening of the entire question and the final adoption of February 1 for the inauguration of spring dating business.

HENDERSON REPORTS LARGE TRANSACTIONS

President of Rubber Exchange of New York Reports Contracts in First Six Months of business Totaled 37,401, Equivalent to 93,502½ tons.

Contracts for crude rubber valued at more than $200,000,000 changed hands during the first six months of operation of the Rubber Exchange of New York, according to a report recently made public by Francis R. Henderson, president.

The report, which covers the period from Feb. 15, when the Exchange started business, to Aug. 31, continues: "Total transactions were 37,401 contracts, equivalent to 93,502½ long tons. This covers all positions traded in. While the majority of trades were based on hedging operations, a substantial quantity represented purchases for actual delivery.

"It is most gratifying that, while we have been operating only a few months, there has been quite an active participation on the part of the manufacturers. At one time, when the tire business slowed up, manufacturers were able to immediately sell against their surplus purchases for near deliveries, and these were quickly absorbed.

"I am thoroughly confident that as the facilities offered by the exchange become more generally known, hedging operations will considerably increase. When we realize that the average annual fluctuation in crude rubber prices from 1916 to 1925 was 44.2 cents per pound, we quickly see the necessity for an organized market, affording at all times simultaneous opportunities for purchase and sale."

Mr. Henderson estimates the 1926 consumption of rubber at 370,000 tons, against estimated imports of 390,000 tons, which gives the rubber requirements of the United States a value of approximately $330,000,000. He points out that the stock of scrap rubber available for reclamation is approaching exhaustion.

"A recent survey of this situation," the report says, "shows that on the basis of the present yearly output of tires and tubes, about 220,000 tons of reclaimed rubber can be produced. In three or four years the present surplus stock of scrap tires in the country will have been exhausted, so that the use of reclaimed in the future will necessarily be limited by the annual scrapping of tires.

"With the return to normal conditions in Continental Europe and the inevitable development in motor buses, particularly in this country, there is no reason to believe that there will be an excessive supply of rubber for several years."

The report shows that the exchange is in a very healthy condition financially. Its seats which originally sold at $1,000, recently sold as high as $6500. The membership is at its limit of 255, of whom 45 reside in England, France, Holland, Belgium and Ceylon.

At a meeting of the Exchange on Oct. 19 the following officers were elected for the ensuing fiscal year: Francis R. Henderson, president; Charles T. Wilson, vice president; and J. Chester Cuppia, treasurer. A board of governers consisting of the above officers and the following members was also elected: William E. Bruyn, Jerome Lewine, David S. Kubie, Fred Pusinelli, James P. Grant, and Clinton T. Revere.

The annual dues were fixed at $250 at the first annual meeting. The reports of both President Henderson and W. S. Hammesfahr, treasurer, showed that the Exchange had prospered during its eight months of existence. A reserve fund for the time when it will need larger quarters and plans to erect its own building is being created.

Entrance to the Present Quarters of the Rubber Exchange. A Fund is Now Being Created to Erect a Permanent Exchange Building.

2,365,518 RIMS WERE APPROVED LAST MONTH

Tire and Rim Association Reports Rims Approved During First Nine Months of 1926 Totaled 20,054,248, Against 19,641,984 for Same Period in 1295

The monthly report of the Tire and Rim Association of America, Inc., shows that 2,365,518 rims were tested and approved in September, against 2,064,275 in September, 1925, but that only 183,859 Ford-size rims were approved during that month, compared to 350,103 in September of last year. For the first nine months of the current year rims approved totaled 20,054,248, compared to 19,641,984 for the same period in 1925.

Detailed figures follow:

RIMS INSPECTED AND APPROVED

Rim. Size	Sept. 1926 No.	%	9 mos. 1926 No.	%	9 mos. 1925 No.	%
Motorcycle						
24x3	1,718	0.1	19,833	0.1	10.536	0.1
26x3	8,606	0.4	72,373	0.4	73,466	0.4
28x3	—	—	2,952	0.0	2,581	0.0
Clincher						
30x3	—	—	2,302	0.0	197,441	1.0
30x3½	183,859	7.7	2,233,980	11.5	3,721,104	19.0
31x4	10,189	0.4	44,005	0.2	564,191	2.9
Balloon S.S.						
25x3½	—	—	722	0.0	460	0.0
26x3½	9,235	0.4	195,917	1.0	—	—
27x3½	—	—	4,041	0.0	2,372	0.0
28x3½	1,023,683	43.3	8,348,898	41.6	5,933,786	30.0
29x3½	50	0.0	254	0.0	144,390	1.0
26x4	18,996	0.8	40,063	0.2	—	—
27x4	243	0.0	335	0.0	—	—
28x4	270,834	11.4	3,215,545	16.7	2,398,346	12.2
29x4	240,693	10.2	1,661,753	8.3	1,245,927	6.6
30x4	1,518	0.1	9,408	0.0	287,464	1.5
27x4½	4,229	0.2	7,116	0.0	—	—
28x4½	25	0.0	25	0.0	—	—
29x4½	19,337	0.8	304,110	1.5	404,705	2.1
30x4½	231,519	9.8	1,417,103	7.1	1,254,592	6.4
31x4½	1,082	0.0	30,535	0.1	245,976	1.2
30x5	23,745	1.0	220,161	1.1	294,340	1.1
31x5	42,669	1.8	360,126	1.2	397,198	2.0
33x6	21,554	0.9	119,668	1.0	58,585	0.3
High Pressure S.S.						
30x3½	30,929	1.3	142,564	0.7	539,156	2.2
32x3	3,513	0.2	12,102	0.1	20,729	0.1
21x4	6,151	0.3	16,654	0.1	1,515	0.0
32x4	9,900	0.4	148,193	0.7	232,638	1.2
33x4	2,853	0.1	13,853	0.1	18,162	0.1
34x4	—	—	54	0.0	503	0.0
32x4½	32,550	1.4	343,860	1.2	501,405	2.6
33x4½	491	0.0	1,510	0.0	1,854	0.0
34x4½	1,613	0.1	24,511	0.1	83,311	0.4
36x4½	—	—	—	—	154	0.0
20″ Truck						
20x5	117,464	5.0	705,511	3.5	681,302	3.5
32x6	21,683	0.9	162,757	0.8	115,386	0.6
34x7	12,208	0.5	47,257	0.2	20,493	0.1
36x8	1,919	0.1	9,523	0.0	9,227	0.0
40x10	—	—	468	0.0	606	0.0
24″ Truck						
34x5	2,000	0.1	38,334	0.2	86,133	0.4
36x6	6,813	0.3	62,446	0.3	53,636	0.3
38x7	497	0.0	2,299	0.0	7,211	0.0
40x8	511	0.0	8,498	0.0	10,582	0.1
44x10	—	—	857	0.0	571	0.0
22″ Special						
36x7	611	0.0	1,797	0.0	—	—
Totals	2,365,518		20,054,248		19,641,984	
Recapitulation						
Motorcycle		0.5		0.5		0.5
Clinchers		8.1		11.7		22.9
Balloons		80.7		79.8		64.2
High Pressure		3.8		3.0		7.4
20″ Truck		6.5		4.5		4.3
24″ Truck		0.4		0.5		0.7

LOST PERSONS INTEREST AKRON RUBBER COMPANIES

Efforts to locate two missing persons have held the attention of the rubber industry during the last fortnight. Or rather the effort was to locate the missing son of a rubber company executive and establish the identity of a shell-shocked war veteran who is confident that he was formerly a rubber worker in Akron.

Stacey Carkhuff, 15, son of S. G. Carkhuff, secretary of the Firestone Tire and Rubber Company, ran away from a school at West Newton, Mass. with two companions on October 15. Their intention was to work their way to Texas and become cowboys. Mr. and Mrs. Carkhuff hurried to New York to direct the search for their son but after tracing him as far as Tarrytown, N. Y., the trail was lost although the lad's companions have been located. The hunt was being continued on October 19.

The war verteran who has a recollection of working in an Akron rubber factory but is unable to tell his own name is now known as "Jerry Tarbot", a name given him by a judge. Since his release from a government hospital, the veteran has been trying to establish his identity. He believes that he worked in Akron, in a factory thought to be Plant 2 of the Goodyear Tire and Rubber Co. He will visit Akron where Goodyear is already trying to determine if he was formerly in their employ and under what name.

FIRESTONE TO BUILD WING ON PLANT TWO

Plans have been drawn by the Firestone Tire and Rubber Company, Akron, for a new wing to be built on its Plant Two in order to increase production of small tires. The wing will be 180 feet long, 60 feet wide and four stories in height. Plant Two, built in 1917 for the manufacture of Ford-size tires, has a capacity at present of 20,000 tires and tubes a day. High pressures, balloons and drop center rim balloons are produced. The addition is expected to increase the capacity of this unit about 20 per cent.

TESTS PROVE 5/8" BEST SIZE FOR GARDEN HOSE

Tests to substantiate the claim of the Rubber Association of America that 5/8-inch garden hose is large enough but not too large for all ordinary purposes have been undertaken by the Bureau of Standards at Washington, and the announcement has been made that the tests show the Association's statement to be correct. A campaign to standardize on one logical size of garden hose was undertaken in 1924 by the Association's Mechanical Rubber Goods Division and was fully described in the August 10 issue of this journal.

The Bureau tested the discharge capacity of 1/2, 5/8, and 3/4 inch hose under different pressures. It was found that the discharge capacity of the 5/8-inch hose is only slightly less than that of the 3/4-inch hose, and that it is considerably greater than that of 1/2-inch hose. The detailed results of the tests will be reported later and will be reviewed in these columns at that time.

INGLE TO RETURN TO SINGAPORE IN WINTER

John Ingle, managing director of the Orient Company, a subsidiary of the Goodyear Tire and Rubber Company with headquarters in Singapore, who has been

John Ingle, who directs the Orient Company

visiting the parent office in Akron, plans to return the latter part of this year. Mr. Ingle is in the United States for the third time since he went to the Far East nine years ago. The Orient Company purchases most of the rubber Goodyear uses and supervises the operation of the company's plantation of 15,000 acres on Sumatra Island.

The Goodyear Singapore branch has its offices in the same building as the Orient Company and distributes tires in the Malay peninsula, Siam and the northern part of Sumatra. The region has a registration of 24,000 cars.

With Mr. Ingle at Singapore are: C. L. Marsh, in charge of the crude rubber department; Hayden W. Shively, secretary; John J. Quinn, manager of warehouses and shipping, and A. B. Hill, sales director. At the Sumatra plantation are: O. D. Hargis, general manager; W. R. Walters, accountant; G. E. Rau, assistant accountant, and J. P. Romein, technical adviser. All are former Goodyear-Akron men.

The Orient Company employs 10 natives in its offices, 150 in the warehouse, and 2,800 on the plantations. The plantations are divided into 12 sections, each under one or two Dutchmen who act as supervisors, 17 altogether.

Goss Goes to Van Wert

O. M. McGee, district representative of the Firestone Tire and Rubber Company at Van Wert, Ohio, recently resigned and has been succeeded by O. E. Goss who has been traveling out of the Firestone branch at Cleveland.

ANNOUNCE RESULTS OF TIRE IMPACT STUDIES

United States Bureau of Public Roads Finds Thick and Narrow Treads are Desirable in Reducing Road Impacts—Tests Covered Period of 4 Years.

Thick and narrow tire treads are desirable in reducing road impact and increasing the profile height has a marked effect in reducing road impacts in both single and dual mountings it has been found by the U. S. Bureau of Public Roads which recently announced the results of a series of tests covering a period of four years.

The experiments consisted in mounting tires of various types in a machine and slowly applying loads, while noting the vertical deflections as indications for stretching deformation curves. The hardness of the tread rubber was measured by an instrument called a durometer and the test itself is known as the "static test".

The Bureau stated that it should be remembered that an impact force expressed in pound units does not necessarily have the same effect upon materials as a static force of the same numerical value in pounds. The full text of the conclusions to date is as follows:

1. Maximum impact forces obtained with motor truck tires in service can be measured with an accuracy sufficient for the needs of this investigation.
2. As static load increases, road impact reaction increases.
3. As static load increases, the ratio of road impact reaction to static load decreases.
4. Thickness and narrowness of tread rubber are desirable in reducing road impact reaction.
5. Increasing the thickness or profile height of rubber has a very marked effect in reducing road impact reaction in both single and dual mountings.
6. In the tire equipments tested, all of which were standard at the time of the tests, dual mounting caused heavier impact forces than the corresponding single mounting of the same total load-carrying capacity. (This was determined on a pneumatic-tired, two-ton truck and a solid-tired, five-ton truck).
7. Appreciable variation of cross-sectional rubber, or breaks on its continuity, cause heavy repeated impacts to be delivered to the road.
8. Dual-mounted tires should always be mounted with the tread design staggered.

To Make Rubber Heels

The Spring-Tite Heel Corporation, Mt. Vernon, N. Y., was recently chartered with an authorized capital of $10,000 to make rubber heels. Incorporators are R. Contiechio, J. and A. Kullman.

N. Y. Dealers Charter Car

Members of the Greater New York Tire Dealers' Association have chartered a special car on the Southern Railroad on a train leaving New York Nov. 13 and arriving in Memphis Nov. 15 for the delegation to the National Tire Dealers' Convention. Delegates include: G. J. Burger, B. Bergen, J. Libien, J. Groth, W. Jude, L. Brown, G. Erlinger, A. C. Schwartz, L. Beller and H. Cogart. The delegation is said to represent a combined purchasing power of $5,000,000 in tires and tubes.

AUGUST TIRE OUTPUT BREAKS ALL RECORDS

Alomst Six Million Casings Produced in Biggest Month in History of The Tire Industry—Shipments Also Set New Record, Thereby Reducing Stocks.

Figures just published by the Rubber Association of America, Inc. covering the operations of the automobile tire industry during August show that the spurt in tire production during that month did set a new record as was predicted at the time. The total number of tires produced in August by manufacturers reporting to the Rubber Association was 4,404,286. Since the Association statistics are estimated to cover only 75 per cent of the total industry, the entire output in the United States during the month must have amounted to 5,872,381 casings which surpasses the record for any previous month. The next largest production was in August, 1925, when 5,607,000 casings were turned out. Comparable figures for the past four years appear in the statistical section in the back of this issue.

Tube Output Also High

Inner tube production also took a decided spurt in August, but while a new record for 1926 was set, the output fell slightly below that of July and August, 1925, and October, 1924. On the 100 per cent basis, the August, 1926, production was 7,424,133 inner tubes.

Shipments of casings also set a record in August. Sales ran almost 900,000 casings beyond production so that a substantial reduction was made in inventories of all classes of tires.

The detailed figures for August which follow are as they were reported by the Rubber Association. They are estimated to be 75 per cent complete.

CASINGS

	Production	Sales	Inventory
Balloon Cord	2,020,347	2,167,943	3,116,440
H.P. Cord	2,246,111	2,581,574	3,459,221
H.P. Fabric	137,528	308,329	723,704
Total	4,404,286	5,057,846	7,299,365

INNER TUBES

	Production	Sales	Inventory
High Press.	3,543,903	4,862,692	7,143,811
Balloon	2,024,197	2,321,747	4,552,647
Total	5,568,100	7,184,439	11,696,458

New England Proofers Busy

New England manufacturers of carriage cloth and automobile topping have experienced a rush demand from the large automobile manufacturers such as Dodge and General Motors during the last few weeks and schedules have been increased to take care of the business. Among the large producers of such proofed goods in the New England district are the Reading Rubber Co., Reading, Mass., the Archer Strauss Rubber Co., Framingham, Mass., and E. I. duPont de Nemours, Fairfield, Conn.

Samson to Build Addition

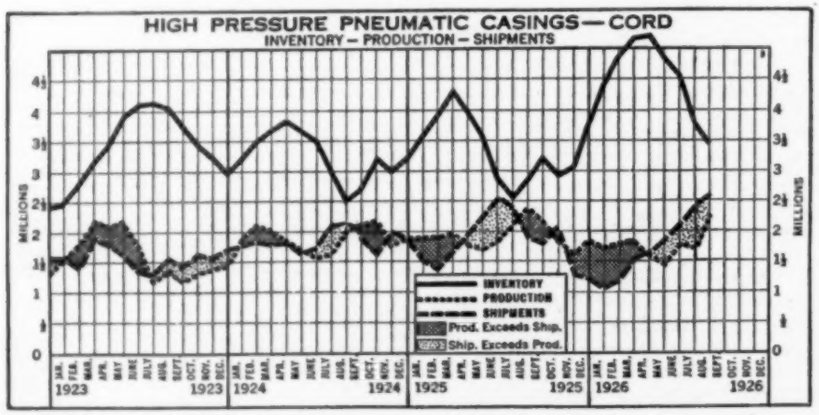
According to a recent announcement made by E. F. Hillendahl, factory manager, and Earl Davis, production superintendent, it is planned to double production facilities of the Samson Tire and Rubber Company within a year. Plans call for an addition with 28,000 square feet of floor space and erection of other buildings shortly afterward. It was stated that the contemplated addition will result in practically doubling the present force of employees, who now number between 500 and 600. Monthly payroll is said to aggregate $75,000, exclusive of salaries paid to administrative officers.

Fisk in Healthy Condition

Acording to Harry T. Dunn, president, the Fisk Rubber Company, Chicopee Falls, Mass., is in a prosperous condition. "Fisk Rubber is doing a good healthy business," said Mr. Dunn recently. "It promises to run between $65,000,000 and $70,000,000 for the fiscal year to end Oct. 31. The factory at Chicopee Falls and the Federal factory at Cudahy, Wis., are currently turning out about 25,000 tires a day.

Goodyear Employees Elect

Tabulation of the 11,000 ballots recently cast by employees of the Goodyear Tire and Rubber Company in the Industrial Assembly elections showed that only two of the eight senators running for reelection were successful, but 19 representatives were reelected. The election was featured by many surprises.



The Rubber Association's High Pressure Cord Casing Chart as it appeared at the End of August. Note that Shipments Have Exceeded Production for Four Months Resulting in Decreased Inventories.

TIRE FACTORIES HAVE HIGH ACCIDENT RATE

Survey Made in 11 States by Bureau of Labor Statistics Shows Tire Industry has Highest Accident Frequency Rate of 23 Industries.

The report of a recent survey made by the Bureau of Labor Statistics comes at an opportune time just as the rubber section of the National Safety Council is about to convene in Detroit from Oct. 25 to 29 for the Fifteenth Annual Safety Congress of the National Safety Council. Rubber executives, who are slated to make addresses at the congress, will now have something to talk about, for the tire industry is reported to have the highest accident frequency rate among 23 others.

Figures recently issued by the Bureau of Labor Statistics of the Department of Labor show that as a result of a survey of accidents in 11 states covering 23 industries, it was found that tire factories in 1925 had an accident frequency rate of 59.08 per 1,000,000 hours of exposure. The severity rate of 2.30 per 1,000 hours of exposure is not the highest, but compares with a severity rate of 4.85 in the paper and pulp industry.

Figures obtained in the survey were compiled from data derived from selected factories and from accident reports for the same factories gleaned from the State compensation commissions and other State agencies collecting accident reports. The 11 States are: Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, New Jersey, New York, Ohio, Pennsylvania and Wisconsin.

The tire industry is shown to have a death rate of 0.07, permanent disability rate of 1.03, and a temporary disability rate of 67.98, making a total accident frequency rate of 59.08. The accident severity rate for death is 0.40, for permanent disability 1.06 and for temporary disability 0.84, summed up in a total accident severity rate of 2.30.

Although the tire industry has the highest accident frequency rate of all the other trades covered, figures used in compiling the report were taken only from 25 factories with 20,097 full-year workers, whereas the low rate of 9.14 for the automobile industry was based on the reports of 73 factories employing 189,385. Four deaths were reported in 1925 by the tire factories, 62 cases of permanent disability and 3,068 cases of temporary disability, making a total of 3,134 accidents.

Two New Balloon Sizes Made

The Goodyear Tire and Rubber Company recently announced the addition of two new balloon tube sizes to the line for branch and dealer delivery. The new tubes, 27x4.40 and 32x6.75, are being made only in the Goodyear regular construction. The 27x4.40 size is used for the Overland Whippet car and the 32x 6.75 is used on some of the larger Studebaker models.

TIRE BUILDERS PLAN TO ORGANIZE UNION

It is Reported that Efforts are Quietly Being Made in Akron to Organize More than 49,000 Workers in Tire Factories—Ask $40 Minimum Wage, 8-Hour Day.

Efforts are said to be quietly going forward in Akron for the organization of a union among the more than 40,000 rubber factory laborers. It may be significant that this work has been started almost simultaneously with the announcement by the American Federation of Labor that it will seek to unionize the automobile industry.

The rubber industry has adhered to open shop principles since its infancy and thus far all attempts to unionize workers have failed. Such an attempt, made in Akron about 10 years ago when a strike was called, met with complete failure. Organizers are telling workers that they stand for a minimum wage of $40 a week, equal pay for both men and women, an eight-hour day, 40 hour week, no so-called "speed up", guaranteed full-year work and the right of organization.

Union organizers have been citing figures of the Department of Commerce which show that wages of rubber workers amounted to $1,584 per man in 1923, and declined in 1925 to $1,519, or 4.1 per cent, as evidence that workers in the rubber industry are underpaid. According to these figures, there are 81,670 tire and tube workers in the entire country, of which number 43,391 are employed in Akron. A number of anonymous letters which lately have been appearing in Akron newspapers voice numerous labor complaints. One of these is that piece work rates have been reduced in tire manufacturing operations, and that as a result the men have to turn out more work than they formerly did.

Conditions Have Improved

It is well known, however, that conditions in the factories are far better than they were five years ago. Machinery is used wherever it is possible to reduce the strain on men and women and much care is exercised to protect workers from injury. Modern hospital facilities are provided in most of the larger factories for those injured or ill. All the heavy work in the pits where tires are cured is being done by machines and curing temperatures have been greatly reduced. Five years ago, it is admitted by factory officials, working conditions in the curing departments were bad, but these have all been changed.

To cite a few companies as an example of what is being done for employees: At Goodyear every facility feasible has been provided for employees welfare, including a gymnasium, club rooms, recreation room and an industrial university where those employees who have the desire may prepare themselves for better work. Firestone maintains a club house similar to Goodyear Hall, and a recreation camp has been provided for employees by the B. F. Goodrich Company at a nearby lake. Many of the rubber companies have taken out group insurance policies.

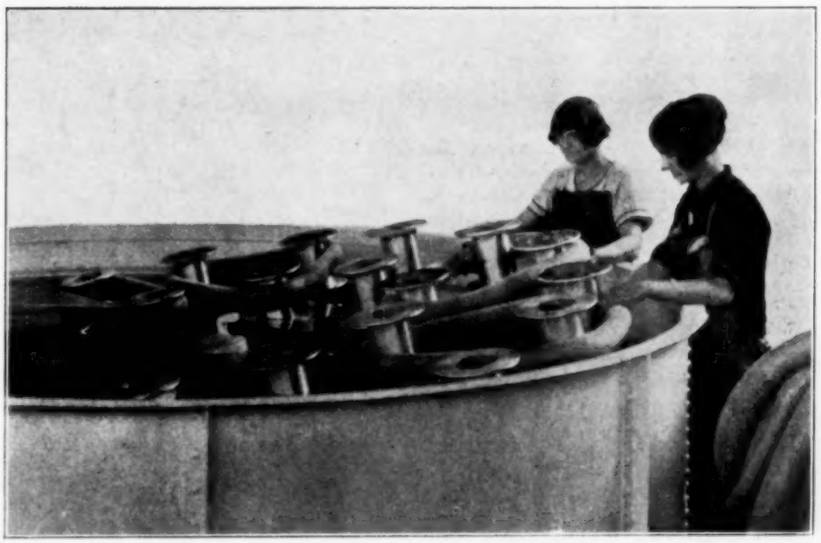
In connection with the recent agitation by rubber factory employees in Akron, it is interesting to refer to a report of the United States Census Bureau released last month. The Statistics, which are for 1925, cover industrial establishments in 20 major cities, including both Akron and Youngstown. In considering these figures it should be remembered that the total number of workers includes many employed only part of the year and that by dividing the total by the entire number of employees the actual wages paid to full-time workers are appreciably reduced.

Total number of workers' total payroll and approximate average wages in Akron and Youngstown are as follows: Akron—44,903 workers; payroll $71,284,342; average yearly wage about $1,600. Youngstown—20,516 workers; payroll $71,284,342; average yearly wage about $1,717.

The Census Bureau listed Akron and Youngstown as among six cities paying the highest average wages to industrial employees.

B. G. Work, chairman of the board of directors of the B. F. Goodrich Company returned to the United States Sept. 28 on the *Olympic* after a trip abroad.

HOW DUNLOP USES A TUBE-TESTING TANK



The Tank in Use in the Dunlop Factory at Buffalo, New York

A DEVICE unique among methods utilized by inner tube manufacturers is the tube testing tank shown in the accompanying picture, which is used at the plant of the Dunlop Tire and Rubber Company, Buffalo, N. Y.

The principle involved is that of submerging in water the inflated tube while stretching it, so that escaping air bubbles will reveal the smallest hole. In this way Dunlop strives to insure its tube users against slow tube leaks, or other imperfections which may cause trouble to the motorist in the course of months or years.

The device consists of a large wheel which revolves on an inclined axis. One half of the wheel (in the picture, the right half) is always above water while the other half is submerged. On the outer circumference of the wheel are mounted a number of metal spools. A smaller wheel revolves within the larger wheel on a similarly inclined axis. This also bears metal spools, half the number mounted on the larger wheel. While the spools are above water, a worker mounts the tubes to be tested over three spools, two outer and one inner. The wheel then revolves, submerging the tube, and the next tube is mounted in the same way.

The inner wheel revolves eccentrically to the outer one and when the upper end of the large wheel is out of the water, the three spools on which the tube is mounted (two outer and one inner) are close together. But as the two wheels revolve and gradually submerge the tube, the single spool on the inner wheel gradually draws nearer and nearer to the axis of the outer wheel, and farther and farther from the other two spools.

When the tube is submerged to greatest depth, the spools are likewise at their greatest distance, and the tube is stretched far beyond the conditions of ordinary wear. An inspector, armed with an indelible marker, can easily detect the smallest leak.

The Dunlop Company finds that its practice of curing seamless tubes in circular form, a Dunlop method ever since it developed its first inner tube, eliminates a great deal of the trouble which is a cause for worry in the ordinary tube cured on a straight pole. Nevertheless, this most rigorous and searching final inspection is insisted upon by the makers to guard against even the "thousandth chance".

O'NEIL DOES NOT FEAR AUTO SATURATION POINT

The saturation point in the automotive industries is as far off today as it was ten years ago, when the term was first heard and the automobile was on the verge of its great development, is the opinion of William O'Neil, president of the General Tire and Rubber Company, Akron. Mr. O'Neil bases his opinion on the fact that about 3,000,000 old cars are going into the scrap heap each year, and in addition to replacements resulting thereby, there is the normal expansion in both domestic and foreign markets to be taken into consideration.

"Of the 24,000,000 cars registered throughout the world, more than 20,000,000 are in the United States", continued Mr. O'Neil. "So we have scarcely invaded the export field in a big way. It begins to look as if the saturation point will be no nearer until the needs of over a billion people are taken care of—and their cars and tires will continue to wear out every so often.

"The tire business grew to great size as an accessory to the automobile, though it is obvious there would be no car industry as it is known today if tire men had not developed and improved their product much more rapidly than car men did their own. Otherwise few men would be rich enough today to buy the tire mileage that most car owners take for granted. Comparing 1913 price lists with today's prices, it would cost a Ford owner $992 to get 20,000 tire miles from his four wheels. Twenty thousand miles in the 32x5 size based on 1913 prices would cost $1,920 for four wheels.

To Reopen Fells Factory

The Fells factory of the Boston Rubber Shoe Company, at Melrose, Mass., a subsidiary of the United States Rubber Company, will reopen October 25 after having been shut down for three months. The plant is expected to be in full operation by Nov. 1. Officials said that there are enough orders on hand to keep the Fells factory, as well as the main factory at Malden, in full operation all winter. The Fells factory employs about 700.

Goodall on Extended Trip

P. H. Goodall, assistant sales manager of the Mohawk Rubber Company, Akron, plans to leave Akron Oct. 25 for an extended trip to the south, middle-west and west where he will call on distributors and branches for the purpose of outlining 1927 sales and advertising policies. Included in his itinerary are Austin, Dallas, Houston, San Antonio and El Paso, Texas, Phoenix, Ariz., Los Angeles and surrounding district, San Francisco and surrounding district, Portland, Ore., and district, Denver, Colo., Omaha, Neb., Minneapolis Minn., Milwaukee, Wis. and Chicago, Ill. The trip is expected to take at least six weeks.

117 P.C. INCREASE IN CRUDE IMPORTS SHOWN

An increase of 117 per cent in the value of crude rubber imports for the first half of 1926, as compared with the same period of 1925, is shown in an analysis of American world trade made by the Foreign Commerce Department of the U. S. Chamber of Commerce. The quantity imported, however, showed a gain of only 8 per cent for the period.

A year ago crude rubber was the third leading import of the United States, with a value of $148,000,000, or slightly over 7 per cent of all imports during the first half of 1925. This year crude rubber is the leading import, with a value of more than double that of a year ago, aggregating $322,000,000, or 14 per cent of the total imports for the first six months of 1926. It is shown in the analysis that the average import price of crude rubber for the first half of 1925 was 34.5 cents; but for the first half of this year it was 69.5 cents, slightly more than double the 1925 price.

Trent Factory Sold

Property of the Trent Rubber Company, Trenton, N. J. was recently sold by the sheriff to Carl K. Withers for $20,000. The sale was held in the Court House at Trenton. The property bought by Mr. Withers did not include the machinery or equipment.

RECEIVERS' AUCTION SALE

4171 Bingham Ave., St. Louis, Mo.

Wednesday, November 10. 10:30 A. M.

The undersigned Receiver appointed by the U.S. District Court for the Eastern Division of the Eastern Judicial District of Missouri will offer for sale at auction, at the above time and place, the following machinery and equipment belonging to The Colonial Liquidating Company (FORMERLY THE ALLIGATOR COMPANY) much of which was used by said Company (prior to the beginning of the Receivership of the above mentioned THE ALLIGATOR COMPANY which Receivership began November 17, 1925 and which Receivership preceded the organization in 1926 of the present operating Company also known as The Alligator Company) in the manufacture of automobile top material and friction tape:

1 Birmingham Rubber Mill 36″x15″x13″; 3 Farrel Rubber Mills respectively 42″x16″x16″ and 60″x20″x22″ and 42″x16″ x16″; 1 Pebble Grain Embossing Machine 72″ width, 24″ diam. paper roll, 12″ Master roll; 1 master roll 72″x12″; 1-62″ Special Water Varnish Machine with rolls; 1 Farrel Ansonia Calender 66″ width, 3 steel rolls 72x24 calender reduction unit coupled for direct motor drive; 1-62″ long grain embossing machine, two paper rolls 16″ diam. 1 master roll 7½″; 2-60″ Starch Machines; 1-72″ Doubling Machine, steel roll and rubber roll; 1 Gem Duck Spreader, Spreader head 50″ width with track; 5 American Tool Spreaders, rubber rolls respectively 62″, 72″ and 80″; 2-45 gal. Varnish Tanks 24″x 48″; 11 steel tanks with agitators 75-200 gallons; 2-60 gallon steam jacketed churns with agitators; 1 Pony Mixer 30x24″; 1-60″ Special Winding Machine; 2 tape cutting Lathes, cutting bars and counter shaft; 1 Cameron Slitting Machine 62″; 2 Overhead trolley track systems, hangars, etc. travelers and weighing device; 1 Rotary Pump; 2 Yaletowne ½ ton spur gear chain blocks; 2-60″ cloth preparing tables, wooden frames; 12 rack trucks 28″x66″x44″; 1 Toledo Calender Scale; 21 galv. iron cement cans 18″x16″; 7 electric motors, 10-125 H.P.

TERMS AND CONDITIONS OF SALE

The property will be offered, first as one unit in bulk and subsequently in separate detail subdivisions; the higher bid or combination of bids to prevail, subject to approval of the Court.

The terms of the sale are CASH.

A deposit of at least 25% (or more if required) will be paid by each purchaser at the time of purchase, the balance immediately payable upon confirmation of the sale.

The property is to be sold without warranty or recourse on the Receiver and same shall be promptly removed, without injury to premises, at the expense, risk and liability of purchaser.

For detailed list or any further information pertaining hereto, apply to any of the undersigned.

LOUIS P. ALOE, RECEIVER,
1819 Olive Street,
St. Louis, Mo.

BEN. J. SELKIRK & SONS,
AUCTIONEERS,
713½ Chestnut St., St. Louis, Mo.

FORREST C. DONNELL,
Attorney for the Receiver,
Boatmen's Bank Bldg., St. Louis, Mo.

RAW RUBBER IMPORTS HIGHER IN SEPTEMBER

Entrance of 38,132 Long Tons Is Highest Since March—Average Declared Value Per Pound Now Down to 39.31 Cents—Imports This Year Far Ahead of 1925.

United States imports of crude rubber in September were higher than they have been since March. The September estimate of the Rubber Association, made as usual on the basis of an average weight for each package of rubber entering American ports, stands at 38,132 long tons. The preliminary report of the Rubber Division, Department of Commerce, based on imports through New York and Boston, indicates that 37,814 long tons of rubber were brought into the country during the month. The Department's figures do not include guayule whereas the Association's compilation does contain 226 tons of such rubber.

Declared Value Lower

The Department's report states that the approximate declared value of the 37,814 long tons mentioned in its report was $33,296,000, an average of 39.31 cents per pound. This represents a small but continued decline in the average declared price, a movement which has been underway since last February when the figure stood at 79.78 cents. The average in August was 40.21 cents. The continued decline leads the chief of the Department's Rubber Division to remark that "very high priced rubber purchased under forward contracts has now mostly reached America, and monthly average prices should be subject to less fluctuations in the next few months".

The detailed compilation of the Rubber Association follows:

U. S. CRUDE RUBBER IMPORTS, SEPT. 1926
(Rubber Association Compilation)

PLANTATIONS[1]

FROM	LONG TONS
Antwerp	62
Batavia	1,144
Belawan-Deli	2,931
Colombo	3,936
Genoa	15
Hamburg	126
Japan and Others	26
Liverpool	108
London	1,909
Malacca	1,037
Penang	3,895
Pt. Swettenham	1,806
Rotterdam	256
Semarang	281
Singapore	17,557
Sourabaya	941
	*36,030

AFRICANS

FROM	LONG TONS
Antwerp	106
Bordeaux	171
Hamburg	27
Havre	45
Marseilles	13
	362

CENTRALS AND GUAYULE

Centrals (Mexico and Central America)	416
Guayule (Mexico)	226
	642

PARAS

Iquitos	13
Manaos	596
Para	489
	1,098

COMPARISON 1925-1926

	SEPT.-1925	SEPT.-1926	Total Importations 9 months ending SEPT. 30th. 1925	1926
Plantations	24,777	36,030	256,244	290,975
Paras	1,486	1,098	11,150	9,613
Africans	122	362	2,193	2,534
Central	500	416	2,231	3,761
Guayule	170	226	2,383	2,929
Manicoba and) Matto Grosso)	16	—	159	26
	27,071	38,132	274,360	309,838

PORTS OR ORIGIN, PLANTATION RUBBER

Shipped From	Tons
Batavia	1,144
Belawan-Deli	2,931
Samarang	281
Soerabaya	941
Total D.E.I.	5,297
Singapore	17,557
Penang	3,895
Pt. Swettenham	1,806
Malacca	1,037
Total Malaya	24,295
Colombo	3,936

Shipped From	Tons
London	1,909
Antwerp	62
Genoa	15
Hamburg	126
Liverpool	108
Rotterdam	256
Total Europe	2,476
Japanese & Others	26
Grand Total	36,030

PORTS OF ARRIVAL, PLANTATION RUBBER

Arrived At	Tons
Los Angeles	764
Portland	13[1]
Seattle	13
Total Pacific	790

Arrived At	Tons
Boston	1,034
New York	34,206
Total Atlantic	35,240
Grand Total	36,030

[1]Plantation rubber imports estimated at 196 Lbs. per package. Note: In addition to the above, 43 tons of balata, 235 tons of waste and 1,075 tons of miscellaneous gums were imported during the month.

SURVEY OF FOOTWEAR INDUSTRY COMPLETED

Survey made by Boston Chamber of Commerce Shows that Nearly Two-Thirds of Rubber Footwear Manufactured in the U.S. is Made in New England.

Nearly two-thirds of all the rubber footwear manufactured in the United States is made in New England and the industry has been growing rapidly in that section of the country, according to a survey recently completed by a bureau of the Boston Chamber of Commerce.

Twenty-three companies are engaged in manufacturing rubber boots and shoes in the United States. Of these, the survey shows, ten are in Massachusetts, four in Connecticut and three in Rhode Island. Massachusetts and Connecticut together make about 60 per cent of the total value of the footwear produced in the entire country. The 17 factories in the New England States are among the largest in the country, with an average of over 1,000 employees each. The industry has grown in a few years from a $50,000,000 business to one producing $80,000,000 worth of products in 1925.

Normally between 15,000 and 20,000 wage earners are employed and nearly $20,000,000 a year is paid in wages. The value of products manufactured in Massachusetts has grown from $18,722,000 in 1909 to $53,626,091 in 1925. Last year the rubber footwear factories in this one State alone consumed 16,880,640 pounds of crude rubber, from which they turned out 2,630,358 pairs of rubber boots, 19,254,267 pairs of rubber shoes and overshoes and 10,695,512 pairs of canvas rubber-soled shoes.

"An even more brilliant development of this important New England industry, with the growing desire and ability of the American people to purchase 'shoes-for-the-occasion'," is predicted.

RUBBER LABOR ORGAN PUBLISHED IN AKRON

The appearance on the streets of Akron of *The Rubberworker*, a labor organ published in the interests of employees of the rubber factories, caused the police to begin an investigation of its distribution. John Stuben, one of the men found distributing the paper, and L. B. Davis, editor and publisher of the paper, who were taken to headquarters for questioning, assured the police that no city ordinances were being broken.

They said that the papers were being sold for two cents a copy and maintained that none were being distributed as free literature. A city ordinance prohibits distribution of handbills without a permit from the safety director.

To Build Tires

After being in operation in Miami for several months, the Custom Rubber Products Company, rebuilder of tires, has acquired a site at Jacksonville, Fla., and will shortly move its machinery there. According to D. B. Simpson, president, the company expects to do a large business in Jacksonville, but will not confine its activities to that city.

A. G. Partridge, who has Joined Goodyear.

A. G. Partridge, former vice-president and sales manager of the Firestone Tire and Rubber Company, and a well known figure in the rubber industry, has joined the Goodyear organization. Mr. Partridge's duties at Goodyear have not been defined but he will be attached for the present to the staff of the sales manager.

AMAZON MOTION PICTURE ATTRACTS RUBBER MEN

Approximately 200 men interested in the crude rubber trade in New York attended a showing at the Rubber Exchange on October 18 of J. G. Araujo's motion picture of the industries and life of the upper Amazon. As is well-known, Mr. Araujo is one of the largest traders in the Amazon valey, the headquarters of his company being in Manaos. Many other products in addition to rubber are traded in.

The motion picture, which shows excellent direction and photography, was prepared by Mr. Araujo in order to disseminate information about the present industries of the Amazon and the great future which lies before them. Rubber and balata gathering were shown at length and proved of great interest to the American rubber traders.

The picture is being exhibited at this time by a representative of Mr. Araujo who will visit several American cities. It will be shown later in Akron.

LATE PRICES OF RUBBER AND MOTOR STOCKS

RUBBER

	Last Price Oct. 18	Last Price Oct. 4	Record 1926 High	Record 1926 Low	1926 High	1926 Low	1925 High	1925 Low	Capitalization	Par Value	Earned Per Share-1925	Earned Per Share-1924	Dividend Rate	Funded Debt
Ajax	[illegible]	8¼	113	4⅝	16	7½	15¾	9½	500,000 sh.	None	$2.01	$1.56	None	$2,385,200
Gantless	40¾	—	54	25½	43½	34	51	26½	58,208 sh.	None	6.00 (i)	—	$2.	None
Firestone	110	112	205	48	125	100	145	96	$3,517,710	$10	27.89	13.60	6	1,500,000 (a)
do 6% pfd.	100	110½	105	75	103½	99	102½	97½	8,000,000	100	159.14	85.40	6	— —
do 7% pfd.	96¾	96½	101	55	100	96½	101	96	18,380,900	100	140.24	67.79	7	— —
Fisk	15⅝	16¼	55	5⅞	26¼	14¼	28¾	10½	811,827 sh.	None	4.26	.85	None	20,200,000
do 1st pfd.	78	78	116½	38⅛	84¼	76⅞	116½	75½	18,198,900	100	30.60	11.80	7	— —
General	146k	140	415	140	375	140	415	233	1,995,400	25	44.35 (b)	34.89 (b)	None	None
do pfd.	110½k	110½	110	101	110	106	105	101	1,072,100	100	175.84	139.83	7	— —
Goodrich	46½	48½	93⅜	16	70⅜	45½	74⅜	36¾	601,560 sh.	None	21.74	9.11	4	38,162,500
do pfd.	94	96½	114½	62½	100	95	102	92	37,472,000	100	51.57	27.95	7	— —
Goodyear Com.	31¼	—	49¾	7½	40	28	49¾	24¾	830,768 sh.	None	15.62	5.14	None	55,726,000
do pr. pfd.	106¼	107	109	88	108⅜	105⅜	109	103	15,000,000	100	140.04	81.08	8	— —
do pfd.	106	107⅞	114⅜	22	109¾	98½	114⅝	86⅛	65,079,600	100	29.45	16.07	7	— —
Hood	62	63	72	43	68¾	57⅛	72	52	120,000 sh.	None	15.48	—	4	6,000,000
India	30	29	176	30	165	30	176	160	63,659 sh.	None	6.69	4.47	2.50	None
Intercontinental	13⅞	15⅝	35	2	21⅝	13½	19⅞	5	603,824 sh.	None	1.53	2.93 (c)	1	None
Kelly Springfield	9⅞	12½	164	9¾	21½	12¼	21⅝	12¾	8,896,000	25	1.93	nil	None	6,500,000
do 1st pfd.	60	64	145	40	74½	61	74	41	2,950,000	100	49.24	51.72 (d)	None	— —
do 8% pfd.	44½	49	110¼	33	73¾	51	72	43	5,264,700	100	24.23	32.34 (d)	None	— —
Lee	9¾	8¾	56½	8	14	6¾	19	11⅜	300,000 sh.	None	1.40	nil	None	None
Miller	33	35	44¾	30	44¾	30	246 (e)	30	260,088 sh.	None	11.50	29.28	2	None
do pfd.	100	100	114	45	104	98½	106½	100	12,451,600	100	28.38	25.91	8	— —
Mohawk	45¼	34	91	35	65	35	85	55	20,000 sh.	None	22.16	10.31	None	None
do pfd.	70	75	80	70	80	70	80	79⅝	1,963,265	100	29.57	17.49	None	— —
Norwalk	—	—	19¼	7⅛	15⅛	7⅛	19¼	12½	1,495,000	10	2.22	nil	.80	None
Seiberling	22⅛	22½	37	19⅛	28½	19⅛	37	23⅝	192,626 sh.	None	4.03	5.50	None	1,500,000
do pfd.	98k	97½	101½	92	97	92	101½	85½	818,600	100	137.29	95.50	8	— —
Star	11k	15	20	10	15	12	23	10	17,322 sh.	None	—	1.60	None	None
U. S. Rubber	53¼	59	143⅝	7	88⅛	50¼	67½	47	81,000,000	100	14.92	3.88	None	113,120,800
do pfd.	107⅞	108¾	123½	30¼	109	101½	108⅞	92¾	65,110,000	100	26.56	12.85	8	— —
U. S. Rubber Reclaiming	12	—	21¼	11	21¼	11	17¼	11	86,670 sh.	None	—	—	None	None
do pfd.	—	—	90	21	90	85	85	45	2,000,000	100	—	—	8	— —

MOTORS

Dodge Bros. "A"	22⅝	25⅜	48¾	21¼	47¼	21¼	48¾	21¾	1,934,563 sh	None	6.57	4.76	None	59,485,000
General Motors	143⅞	165⅞	225¾	55¾	225¾	113¼	139¾	64⅜	8,600,000 sh.	None	19.15	7.37	16 (f)	23,724,000 (g)
Hudson	47	51¼	139½	19½	123¼	49⅝	139½	33¾	1,596,660 sh.	None	16.05	6.11	3.50	None
Hupp	23¼	24⅞	31	2¼	28⅝	17	31	14¼	9,138,090	$10	4.15	1.76	1	None
Jordan	16	18½	66	21	66	21	65	35⅝	126,000 sh.	None	2.91	4.03	3	None
Moon	13¼	16½	42	9⅛	37⅝	23⅛	42	22¾	180,000 sh.	None	6.13	3.11	3	None
Nash	55⅛	58¾	66	52	66	52	488 (e)	193½ (e)	2,730,000 sh.	None	54.13 (h)	28.43 (h)	3 (f)	None
Packard	32¼	35¼	48½	9¼	45¼	31⅝	48½	15	26,147,220	10	4.84	1.67	2.90 (f)	None
Paige	13⅛	15¼	46½	11	28½	13⅜	33	17⅝	676,474 sh.	None	3.04	2.14	1.80	1,000,000
Pierce-Arrow	19⅝	25¾	99	6⅛	43⅛	19	47¾	10⅞	328,750 sh	None	2.26	nil	None	3,950,000
Studebaker	51⅝	56	68⅝	30	61⅝	47	68⅞	41¼	1,875,000 sh	None	8.34	6.81	5	None
Willy Overland	19½	21½	34⅞	4½	34	18	34⅞	9⅛	12,635,250 sh.	None	4.03	nil	None	7,475,000

(a) Also guarantees $2,000,000 subsidiary's 6% bonds. (b) On 39,908 shares. (c) On 31,370 shares. (d) Deficit. (e) Old $100 par stock. (f) Partly extra. (g) Subsidiaries bonds guaranteed. (h) On old $100 par stock. (i) estimated. (k) Asking price.

$30,000,000 GOVERNMENT LOAN FOR COTTON MEN

A credit of $30,000,000 to the Staple Cotton Co-operative Association to aid in the orderly marketing of the crop was recently made available by the Federal Farm Loan Board. Thus, loans may be made to cotton farmers to the full extent of the price quoted the day of delivery to the co-operatives. Of the $30,000,000 in commitments made by the Intermediate Credit banks, it is reported that $7,000,000 in loans has already been drawn. In making the action of the Board known, A. C. Williams, chairman, assured the co-operatives that the Government was willing to extend any "proper credit" for marketing the crop.

Du Pont to Exchange Stock

E. I. du Pont de Nemours and Company recently informed common stockholders in a letter that Oct. 28 had been fixed as the date for exchanging the present common stock of $100 par value for the no-par stock. The exchange will be made on the basis of two shares of the new for one of the old on and after Oct. 28 at the transfer office, 224 W. 57th St., New York City. Application is being made to list the new shares on the New York Stock Exchange and the listing will be effective about Oct. 28, but trading in the old stock will continue for 10 days after the effective date of the listing of the no-par stock.

File Firestone Statement

The Firestone Cotton Mills, Fall River, Mass., recently filed the folowing statement with the State Commissioner of Corporations for its fiscal year, ended June 10:

Assets—Real estate, $1,001,793; machinery $1,955,614; merchandise, $429,916; cash $73,831; accounts receivable, $789,714; deferred items, $68,444; furniture, fixtures, tools, $963; vehicles, $1,000. Total, $4,321,275.

Liabilities—Capital stock, $2,000,000; mortgages $2,000,000; accounts payable, $139,693; reserves [illegible] $66,335. Total, $4,321,275.

U S Declares Dividend

The United States Rubber Company recently declared a quarterly dividend of 2 per cent on the first preferred stock. The dividend is payable Nov. 15 to stockholders of record Oct. 20.

BANKRUPTCY PETITION FILED BY SYRA-CORD

A voluntary petition in bankruptcy, listing liabilities of $331,068 and assets of $324,969, was recently filed in the United States District Court at Utica, N. Y., by the Syra-Cord Tire and Rubber Company, Syracuse, N. Y. The City Bank Trust Company, trustee for a mortgage of $300,000, had filed an application for a receiver in a foreclosure suit prior to the filing of the voluntary petition.

A. F. Smith Promoted

A. F. Smith, who has been master mechanic of the fabric plant of the Mason Tire and Rubber Co., at Kent, Ohio, recently left for Quitman, Ga., to take charge of two fabric plants owned by the company.

City of Akron Bonds

A new issue of $1,236,200 City of Akron, Ohio, 5 per cent improvement bonds has been jointly purchasd by A. B. Leach & Co., Inc., E. H. Rollins & Sons, the Illinois Merchants Trust Company and the Merrick Company. The bonds are being offered at prices to yield from 4.10 to 4.35 per cent.

Financial Items

Rubber and Motors

GOODYEAR FINANCING OPPOSED BY TRUSTEES

Plans of P. W. Litchfield for Refinancing the Capital Structure and Liquidating Back Dividends of Goodyear Tire and Rubber Co. Rejected by Trustees

A plan devised by P. W. Litchfield, president, for refinancing the Goodyear Tire and Rubber Company which calls for the issuance of $50,000,000 in 5½ per cent bonds to mature in 30 years and the retirement of the 8 per cent 20-year first mortgages, as well as the 10-year 8 per cent debentures, has not met with the favor of the common stock voting trustees. The plan includes replacing the 8 per cent prior preferred stock with a new issue of $14,000,000 in 7 per cent stock, and the abolition of voting trusts, returning the direct control of the company to the stockholders. If the plan were adopted, preferred stock dividends now in arrears $29.75 would be paid by a new stock issue.

Following a conference with the four other trustees, Frank A. Seiberling, former president of the Goodyear Company and now president of the Seiberling Rubber Company, recently announced the rejection of the plan. The other trustees are S. B. Manton, E. E. Mack, C. R. Erwin and C. L. Robinson. Comment on the plan was refused by Mr. Seiberling.

The refinancing plan was the answer of Mr. Litchfield, it is understood, to suits now pending against the company which have been started in the Ohio Supreme Court to cancel the management stock, through which Dillon, Read & Co. and other bankers, who financed the company in 1921, retain control Griswold, Green, Palmer & Hadden, a Cleveland law firm representing a group of stockholders, declared that the approval of the Litchfield plan would not have stopped the litigation and that they intend to push the suit. The firm represents Frank C. Tomlinson, of Cleveland, a common stockholder, who in his petition attacks the entire Goodyear 1921 refinancing plan.

In an answer filed Oct. 13 in the Supreme Court at Columbus to the suit started last August against the company by Prosecutor G. Walter Booth of Akron, the Goodyear Tire and Rubber Company declared that its "management" stock was in compliance with all Ohio corporation law.

It is asserted in the brief that "Ohio laws do not require that stock in corporations similar to Goodyear, recognized under the no par act, shall have par value of $5 or some multiple thereof, as the complaint contends." The suits of Laura L. T. Weiss, settled in February, 1923, in which contentions similiar to those upon which Mr. Booth bases his action are alleged to have been made, are reviewed by the defense. The brief asserts that the Summit County Common Pleas Court entered an opinion at the conclusion of the Weiss suits, in which it was held that the management stock is a valid lien on the assets of the Goodyear Tire and Rubber Company.

Speaking of the action of Prosecutor Booth, the defense says, "It was not actuated by an intention of protecting the public interests," as it is contended that none is involved. It is rather, according to the petition, "a proceeding solely at the instance and suggestion of stockholders unknown to the company, in an attempt to obtain control of the Goodyear corporation." The brief recites the history of the Goodyear reorganization and says that in 1920 the company found itself in serious financial condition, facing receivership or complete reorganization and refinancing. In February, 1921, the surplus of $9,000,000 the company had six months previously had been changed to a deficit of $61,000,000. Debts and other obligations then totaled $125,000,000.

GOODRICH NET PROFIT $1,750,000 IN QUARTER

Although the B. F. Goodrich Company does not make quarterly statements of earnings, it is believed in financial circles that net profit for the three months ended Sept. 30 after all charges and taxes was about $1,750,000. In the first half net income after all charges and taxes was $1,358,616, or 36 cents a share on the 601,560 shares of no par value common stock outstanding, after preferred dividend requirements.

Prospects are said to be excellent for a continuance of good business in the final quarter, and it is expected that these profits will approximate those of the September quarter, for the company will get the benefit of a heavy footwear demand in the current quarter. Despite the fact that the Goodrich company is expected to earn its common dividend this year with only a small margin over, the surplus is sufficiently large to insure continuance of dividends on common stock if the outlook is encouraging for next year.

Motor Sales Decline

Automobile sales are gradually declining and production is following the same course in conformance with the seasonable trend, it is reported. However, the market is said to be still above normal, and there seems to be no reason to doubt that the record for the entire year will be well above that of any previous period in the history of the automobile industry

AKRON PRODUCTION IS ESTIMATED AT 125,000

Schedules of Akron Factories Provide for Continuance of Relatively High Production During Remainder of October, Comparing Well with Recent Operations.

Nearly all the Akron tire factories are running close to capacity, with day and night shifts employed in some cases. Production is estimated at about 125,000 tires a day which, if it continues as expected for the remainder of the current month, will make October compare favorably with recent operations.

Despite the slight seasonal recession in demand for tires reported a few weeks ago, business is well ahead of last year, with total tire consumption for nine months about 15 per cent above the 1925 sales for the same period. It is estimated that 58,000,000 tires will be bought by American motorists in 1926, of which 38,000,000 will be distributed through dealers, as compared with 33,000,000 last year. Original equipment is anticipated to take more than 20,000,000, against 17,000,000 used by automobile manufacturers in 1925. Since the latest price cut in original equipment tires became effective, shipments to the automobile factories have been larger.

Officials of the Goodyear Tire and Rubber Company say that all previous records for tire production were broken at the Akron factory during the third quarter, ended Sept. 30, during which more than 2,500,000 tires were manufactured and shipped. Output in August, which was the biggest month in the history of the company, totaled 1,000,000 tires and 1,900,000 tubes.

It was learned from executives of the Firestone Tire and Rubber Company that sales of the company for the fiscal year which ends October 31 will be larger than those in 1925, although earnings will be substantially smaller in common with most of the rubber companies. However, the companies now paying common dividends, including the Firestone Company, the B. F. Goodrich Company, Miller Rubber Company, General Tire and Rubber Company and the India Tire and Rubber Company are confidently expected to earn the disbursements with comfortable margins.

Not only has tire production held up well at the factory of the B. F. Goodrich Company but operations are being speeded up in the rubber footwear department. Executives are optimistic over the prospects for footwear business this fall and winter.

General, Seiberling, Mohawk, India and Mason were also at capacity or close to it at the time of this writing.

BETTER SALES REPORTED BY BOSTON WOVEN HOSE

The Boston Woven Hose and Rubber Company, East Cambridge, Mass., recently reported for the fiscal year ended Sept. 1 gross sales of $10,923,226, which compare favorably with $10,343,050 in the preceding year. Although the company publishes no income account, President Hall said that the $6 common dividend was earned by a good margin after liberal depreciation charges.

The balance sheet showed current assets of $3,796,834, compared with $3,723,809, as of Sept. 1, 1925; and current liabilities of $418,629, against $340,395, leaving a net working capital of $3,378,205, as compared with $3,383,414 on Sept. 1, 1925. The surplus increased from $1,859,299 to $1,924,676. Cash amounted to $862,561; accounts receivable, $1,114,101 and inventories $1,800,504.

To Make Rubber Heels

The R. S. W. Rubber Corporation, New Rochelle, N. Y., was recently chartered at Albany with an authorized capital of $5,000. to manufacture rubber heels. Incorporators are Murray Wiener, 1047 58th St., Brooklyn, N. Y.; Bernard Rosen and Sidney Sierce, both of 883 E. 162d St., New York City. W. J. Sweeney, 10 E. First St., Mt. Vernon is attorney for the new corporation.

DISCOVER 25 YEAR OLD PARA TREE IN FLORIDA

Although many trees and plants that produce rubber are thriving in experimental plantings in Florida, it was not known that *Hevea brasiliensis* would grow to maturity in that State until representatives of the Department of Agriculture recently discovered a small tree of the species growing at Palm Beach. This tree has stood for almost 25 years under unfavorable weather conditions, which proves that Hevea is much hardier than has been supposed. Experiments in more favorable locations are needed, says the Department, to determine whether Para rubber may be grown successfully in Florida.

The tree is in light sandy soil and is so closely surrounded and shaded by other trees that it has grown but little, but it has lived without artificial protection and must have stood temperatures below frost on numerous occasions, as records in Palm Beach County show temperatures of 24 to 28 degrees in seven winters since 1894. The tree is known to have been in its present location since 1902, and the records of the Office of Foreign Seed and Plant Introduction of the Department of Agriculture show that a Hevea seedling was sent to Palm Beach in April of that year. The Florida tree is a dwarf, about 20 feet high, but slender and leaning, with the trunk less than four inches thick at the base; the leaves are as large as in the tropics, some with the largest division more than a foot long and more than four inches wide.

The survival of this tree, however, does not prove that commercial production of Hevea rubber in Florida is feasible.

Kafer Sails for Europe

Frank Kafer, for the past nine years a field representative of the Goodyear Tire and Rubber Company factories, sailed for Europe Oct. 16 to take up his duties as a factory representative of the company abroad, with headquarters in Paris. Mr. Kafer joined the Goodyear organization in New York City in 1917, was in Newark until March 1925, in Chicago until December 1925 and in Kansas City until he returned to the Akron factory in September to prepare for his work abroad. He will be in Europe for one year.

Offers New Service

The Dunlop Rubber Company, Ltd., Ft. Dunlop, England, recently announced a new service for automobile owners. A short but intensive course of instruction on how to get the best wear out of tires and wheels is to be given gratis at the factory.

THE NAUGATUCK CHEMICAL COMPANY
Materials for the Rubber Goods Manufacturer
NEW YORK

HEPTENE

(Heptaldehyde Aniline)

In spite of much research by ourselves and our competitors HEPTENE remains today the best all round and most economical accelerator for Tubes and Tire carcass stocks where the cure is being made at 35 pounds steam pressure and above.

No troubles with scorching or stock storage during the hottest periods of the summer have been reported to us by the users of HEPTENE.

The sales of HEPTENE are large and constantly increasing—an undeniable proof of its desirability.

If you want to reduce your accelerator costs to the lowest possible point with no attending factory troubles by all means give HEPTENE a thorough trial.

THE NAUGATUCK CHEMICAL CO.
1790 Broadway New York City

CATALPO!

URGE RUBBER STRIPS FOR CHICAGO STREETS

After Investigating Other Methods of Marking Off Safety Zones, Engineers Recommend Use of Orange-Colored Rubber Strips to City Council.

A committee of the Chicago City Council, which has been making a survey of traffic conditions in that city, has recommended orange-colored rubber strips for marking off safety zones. Investigators found various methods in vogue in various parts of the city: In some cases, ordinary paint had been used in marking the boundary lines; in other instances, aluminum and other metal strips have been laid in the road. None of these methods met with the favor of the committee, which, after due consideration, has recommended to the City Council that in the future highly-colored rubber strips of a standard size be set into the pavement to protrude slightly above the surface.

Alderman Dennis Horan, chairman of the committee on streets and alleys, stated that the matter of safety zones in Chicago has become an important factor in the safety campaign being pushed by various civic organizations. He promised that Chicago would be placed in the front rank for providing safe means for passengers boarding and leaving street cars.

The decision of the committee to recommend rubber markers was due to the fact that they have given the best satisfaction at State and Adams Streets and to the statements of engineers who stated that the rubber strips installed on those streets will last indefinitely. In recommending the use of rubber for the road markers, the engineers compared the life of automobile tires to the short life of non-skid chains. It is the opinion of these engineers that rubber strips set in concrete will outlast the concrete. During the investigation city engineers examined aluminum markers at Randolph and Clark Streets. These showed considerable wear and some were broken. It was said that concrete reacted on the metal, causing it to disintegrate in a short time. The use of tile also was found to be impractical.

Davis Returns to U.S.

Edgar B. Davis has returned to New York from his trip to the Philippine Islands where he investigated the possibilities for a large rubber plantation development. D.M. Figart, who was with Mr. Davis in Manila and Singapore, is returning to the United States by way of Paris and London and has not yet reached New York.

Carmi Thompson, special investigator for President Coolidge, who was in the Philippines at the same time as Mr. Davis, sailed from Manila on October 4. He will visit China and Japan and will probably reach Seattle on November 19. His report to the President is expected to cover the rubber planting situation. A statement issued by Mr. Thompson just before he sailed is interpreted to mean that he will recommend the definite postponement of the question of Philippine independence for a few decades.

Eastern Leases Floor

The Eastern Tire and Rubber Company recently leased the fourth floor in its building at 72 High St., Boston, Mass., to the Dayton Scale Company.

California Goodyear Busy

The factory of the Goodyear Tire and Rubber Company of California, Los Angeles, is at the time of this writing working to capacity 24 hours daily, with 3,000 employees on the payroll. The present output is 7,400 tires a day. According to H. H. Blythe, vice president in charge of operations, production schedules call for a small decrease late this month or early in November. It is expected that the gross business of the company will be in the neighborhood of $30,000,000 this year. Business for the first half was about $15,000,000, in comparison with $27,000,000 for the entire year of 1925. Mr. Blythe accompanied by William Stephens, recently returned from an extensive tour in Europe.

CATALPO!

The Philadelphia Rubber Works Company

Manufacturer of

RECLAIMED RUBBER

of

STANDARDIZED QUALITY

NEW YORK
52 Vanderbilt Ave.

AKRON, OHIO PHILADELPHIA, PA.
Land Title Bldg.

Logan Returns to Goodyear

George C. Logan, until July, 1926, the New York manager for The Mason Tire and Rubber Company, has joined the sales organization of the Goodyear Tire and Rubber Company as representative in charge of bus and truck tire sales in the company's southern division with headquarters in Atlanta, Ga. He assumed his new duties October 1.

Logan was a member of the Goodyear sales organization from 1919 to 1921, his first service being in the truck tire department at Akron. He was later made manager of the truck tire department in the New York branch, and finally manager of all tire sales there.

After leaving Goodyear he became special representative of the president of The Ajax Rubber Company, was eastern division manager for The Racine Rubber Company, and from 1923 until 1925 handled eastern sales for The Star Rubber Company, resigning to join the Mason Company in August, 1925.

Rubber Processes Formed

J. T. Asbury, C. J. Ferris and F. C. Taylor, 120 Broadway, New York, who are named as incorporators in papers filed in the office of the Secretary of State, were recently granted a charter for Rubber Processes, Inc., which will do business in New York County. The new company will manufacture special rubber goods. Authorized capital is $100,000.

SERVICE

Producing, selling and shipping our own Carbon Black gives us the intimate contact which permits careful supervision of each order from start to finish.

J. M. HUBER, INC.
CARBON BLACKS ⤷ CLAYS ⤷ DRY COLORS
130 West 42nd St., New York City

Branches in Principal Cities in U. S. and Foreign Countries

PROOFING DIVISION MEETS AT FAIRFIELD

Members of the Rubber Proofing Division of the Rubber Association of America met in Fairfield Conn., late in September and inspected the factory of the Rubber Products Section of E. I. du Pont de Nemours and Company. Luncheon was served at the Greenfield Hill Country Club, a short business session followed and the rest of the day was devoted to a golf tournament.

Ernest R. Catheart, manager of the Rubber Products Section of the Dupont company, won the low net prize, consisting of a dozen golf balls, and M. L. Green of the Plimpton Manufacturing Company, Boston, won a fountain pen desk set as the low gross prize.

Others who participated in the tournament included W. H. Martin, of the Plymouth Rubber Company, Canton, Mass.; J. E. LaBell of the McKay Rubber Company, Stoughton, Mass.; H. K. Johnson of the F. S. Carr Rubber Company, Framingham, Mass.; H. Hicks of the United States Rubber Company; P. J. Byrnes and L. M. Jackson of the J. C. Haartz Company, New Haven, Conn.; George Flint, assistant secretary of the Rubber Association; and S. G. Bvam, chairman of the Division, A. L. Brown, J. J. McLaughlin and M. N. Nickowitz.

Triangle at Capacity

Peak production was maintained throughout September at the factory of the Triangle Tire and Rubber Company, Canton, Ohio, according to M. C. Wyatt, general manager. With the aid of a night shift, production each day was from 500 to 550 tires. Mr. Wyatt predicts steady operation for the remainder of the year, as inventory has been low for some weeks.

Hodgman Displays Line

The Hodgman Rubber Company, Framingham, Mass., with New York City headquarters at 200 Fifth Ave., recently displayed the full line of calendered clothing in the New York office. In addition to men's and boy's black rubber coats the firm showed its standard line of policemen's and firemen's coats, automobile shirts, fishing shirts, poncho blankets, camping blankets and black rubber hats.

Houston Dealers Organize

The Houston Tire Dealers' Association, Houston, Texas, was recently granted a charter. The new organization has no capital stock. Incorporators named in the papers on file are U. S. McNally, J. H. Glass and C. K. Batterson.

CATALPO!

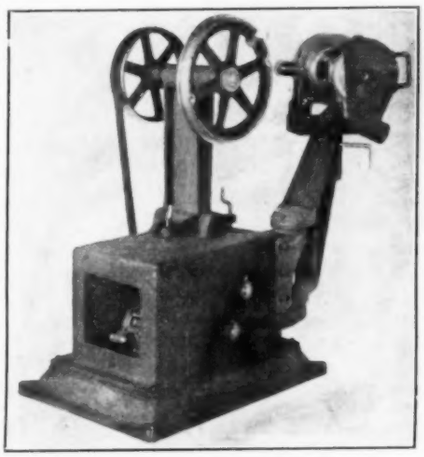
New Factory Equipment

BUFFING MACHINE FOR AIR BAGS PERFECTED

The Banner Machine Company, Columbiana, Ohio, manufacturers of rubber molds, cores and dies, tire making equipment and special rubber machinery, recently announced that the Banner Buffer for air bags has been developed to a point where it can be produced in quantities. The machine is not an experiment, but has been thoroughly tested in many rubber factories throughout the country.

The cost of air bags has always been a large item in the vulcanizing of cord tires. Devices and methods which greatly increase the number of cures per bag are now being successfully employed by many tire manufacturers, but most of the methods in use for increasing the life of air bags require the removal of the oxidized surface of the bag after a certain number of cures. By employing an effective method of removing the crust which forms on the bags, it is not unusual to double the number of cures per bag and thus effect a substantial saving. Obviously, the saving is greatly increased by a quick and easy means of removing the hard oxidized crust of the bag, and it is for just this purpose that the Banner Air Bag Buffer has been designed.

In operation the bag is mounted upon an adapter ring and revolved at slow speed. A rubber plane driven by a large motor is mounted so as to allow the bag to be buffed from the bead to the center of the tread. The bag is then reversed on the adapter for buffing the other side. The success of the Banner Buffer is largely due to the sensitiveness of the buffing wheel to the operators hand. This insures uniform buffing which is not possible when the buffing wheel is not manually controlled.



Banner Buffer for Air Bags

The rubber plane is a patened buffing wheel in which hardened steel studs are staggered and lapped. This design gives rapid cutting action and will not clog, and by reversing the plane on the shaft the cutting pins are maintained sharp. The pins may be replaced when worn down.

HAARTZ MANUFACTURING NEW RAINCOAT MATERIAL

According to J. F. Jackson, president, the J. C. Haartz Company, New Haven, Conn., one of the largest manufacturers of fabrics for automobile tops in the country, has placed on the market a branded highly-colored raincoat material which is being sold under the name "Daro Gloss". The material has been designed for manufacturers of high quality raincoats, and the Haartz guarantee permits the raincoat manufacturers to sell a warranted coat. Manufacturers will be supplied with labels to sew on the coats.

The company plans an advertising campaign to tell the story of the raincoat material and give the names of manufacturers making coats from it. Approximately 4,000,000 yards of rubberized fabrics were manufactured by the J. C. Haartz Company in 1925.

Andreoli Back from Abroad

Joseph A. Andreoli, export manager of the India Tire and Rubber Company, Akron, recently returned from a two months trip abroad during which he visited Germany, Austria, Norway, Denmark, Sweden, Holland, England and Scotland. He effected several new connections for the India company, and found that American made tires are meeting with favor everywhere.

CLASSIFIED ADVERTISING

10 cents a word, minimum charge $2.00, payable in advance.
Address replies to Box Numbers, care THE RUBBER AGE, 225 Fourth Ave., New York.

HELP WANTED

A company long established in the accelerator field desires to obtain a salesman to represent it, in the West, with headquarters in Chicago. Salary, commission and all expenses paid.
Box 442, THE RUBBER AGE

FOR SALE OR LEASE

TWO STORY RUBBER GOODS FACTORY, 90 x 125, with foundations for additional story and land to double the size of present plant. In suburbs of Boston. Suitable for sheet, punched, or moulded goods. Now equipped for automobile tires and tubes. Immediate possession on satisfactory cash and terms basis. Brokers protected. Details on request. Address Box 438, THE RUBBER AGE, 225 Fourth Ave., New York City.

WANTED

Rubber gas mask tubes, war pattern, wanted in any quantity, also Sorbo sponge rubber. State lowest price and quantity. Hammerton, 13 Regents Park Road, London, N. W. England.

BUSINESS OPPORTUNITY

RUBBER FORMULAS

The latest formulas for balloon and high pressure tires and tubes; quick-cure cements; heels, soles, sponge rubber; belt frictions; dipped goods; reclaiming process. Send for our new list. RUBBER COMPOUND BUREAU, 727-A Second National Bldg., Akron, Ohio.

FOR QUICK RESULTS!

RUBBER AGE WANT ADS *are best!*

CATALPO!

INTERNATIONAL PULP CO., *41 Park Row, New York, N. Y.*
SOLE PRODUCERS OF PURE **ASBESTINE** SPECIALLY PREPARED FOR USE IN RUBBER
Covered and Protected by Letters Patent Registered at U. S. Patent Office, Washington, D. C.
LIBERAL WORKING SAMPLE FURNISHED FREE

SINCE 1880

Rand

GUARANTEED

RUBBER GOODS

"They Last Longer"

Reg. U. S. Patent Office

RANDPRINT APRONS

Dress Shields	Guimps and Brassieres
Rubber Sheetings	Rubber Aprons
Bunny Baby Pants	Pure Rubber Sheets
Sanitary Aprons	Rubber Bibs
Sanitary Elastic Belts	Crib Sheets
Sanitary Bloomers	Bathing Caps
Sanitary Stepins	Rubber Specialties
Powder Puff Pockets	Rubberized Sheeting
Rubber Gloves	Hot Water Bottles

RANDPRINT RUBBER SHEET GUM cut to pattern for manufacturers.

Special Goods To Order

Made by

RAND RUBBER CO., INC.

Formerly Brooklyn Shield & Rubber Co.

Sumner Ave. & Halsey St., Brooklyn, N. Y., U. S. A.

EMBOSSING CALENDERS

For Artificial Leather, Oil Cloth, Carriage and Automobile Covers

DRYING MACHINES

with Copper or tinned iron Cylinders for Cotton Ducks, Drills and Sheetings

The Textile-Finishing Machinery Co.

OFFICE, No. 83 EXCHANGE PLACE

PROVIDENCE, R. I.

AKRON-WILLIAMS A-W PRODUCTS

Heater Presses
Molds and Cores
Tubing Machines

THE WILLIAMS FOUNDRY & MACHINE CO.

"In Business Since 1888"

AKRON, OHIO

ROYLE—

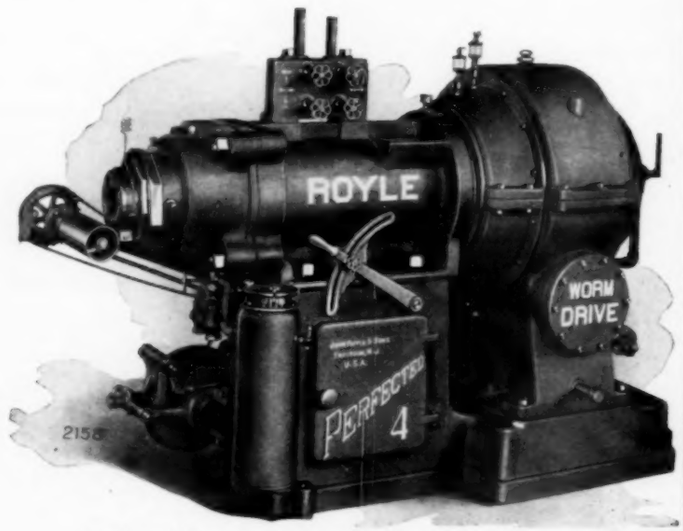
The Tubing Machine Supreme!

There's nothing crude, unhandy, or wasteful about a Royle machine. Every part is standardized, interchangeable, and quickly replaceable when necessary.

High speeds—sensitive controls—powerful silent drive.

The Royle is a thoroughbred from foundry to paint.

At your service.



6-inch machine equipped for making inner tubes. Soapstone fittings. Electric heated die. Apron takeoff. *Bulletin* 307.

JOHN ROYLE & SONS, Paterson, N. J.

TUBING AND INSULATING MACHINES — HOSE LOOMS

EDITORIAL COMMENT

Prompt Service

JUST BECAUSE the Rubber Division of the Department of Commerce has done the usual thing in furnishing the rubber industry a prompt report on the stocks of tires held by dealers is no reason why some commendation should not be expressed for such service.

Since the Rubber Division's questionnaires asking tire dealers to indicate the number of tires they had on hand did not reach the dealers until September 30, to be answered as of October 1, the first few days of October had passed before the real work of compiling the data could begin. Yet on October 15 the Division was able to distribute to all parts of the tire industry a report including the composite data furnished by more than 29,500 dealers throughout the country.

Complete data on the average number of casings, balloon casings, inner tubes and solid tires was furnished together with an analysis of the thousands of dealers according to the size of their stocks, the latter being done in order to establish a basis of comparison with previous surveys. And before the work of compilation could be begun there was the not insignificant task of segregating the usable forms from the many others that show that the dealers no longer sell tires or that their names should not have been placed on the mailing list in the first place.

Definite information about tire dealers' stocks benefits the tire manufacturer only if it reaches him in time to permit adjustments in production or distribution schedules. Thanks to the Rubber Division, he has such information even more promptly than could logically be expected. It is only a deep interest in service to one industry that could prompt a government organization to handle so huge a task in so expeditious a manner. The rubber industry has reason to be grateful for such a spirit of cooperation.

Policy and Method

MOVING EVEN quicker than did the British government when certain of its colonies were burdened with an overproduction of rubber, the American government has not been slow to note the unremunerative prices of cotton which have followed the forecasts of a record crop in the southern states. Supplementing the effort of local bodies to remedy the situation, the national government has taken steps toward relief.

The pride with which the Administration points to the arrangements being made for a credit of $30,000,000 to help cotton growers keep their bumper crop off the market until prices increase is considerably akin to that shown by British officials in speaking of rubber restriction and the benefits it has conferred on Britain. Papers supporting the President have been quick to point out that while the chief aim of the two systems may be the same, the methods are vastly different. Since many thoughtful Americans have condemned the method rather than the policy of British rubber restriction, the distinction may be worth noting after all.

Rubber in the News

THE BRITISH rubber restriction scheme, if it has been of no other benefit to American rubber manufacturers, has at least placed rubber on a par with cotton and wheat in the columns of the daily press and the rotogravure supplements of Sunday editions. Prior to 1922 it was an uncommon thing to seek a new use of rubber "covered", as the newspaper men have it, by a photograph showing the device or appliance in use. But the dispatches regarding restriction have been so numerous of late years that newspaper editors and feature writers have gradually grown aware that rubber is a commodity that finds other uses than in tires and footwear. They now seem to be quick to appreciate the human-interest attached to a picture of even a homely girl (if such is extant) in a rubber bathing suit. Of late weeks there seems to have been no dearth of rubber swimming and life-saving appliances in new and strange forms. Strangely enough, the fact that summer is now but a memory has done nothing to keep these pictures out of the papers. It appears to be sufficient that the device photographed be made of rubber or contain rubber in some form for a photograph of it to go over. The prominence of the person wearing or using it apparently makes little difference. The America that heretofore has known nothing of the rubber industry has realized that rubber plays an important part in all recreation.

More Synthetic

IN PAST years it has always been the international economics of rubber that has received attention at the Williamstown Institute of Politics. In this year's meetings, now several weeks past, the chemists had their inning. The discussions centered around synthetic products and naturally synthetic rubber was not neglected.

One notable speaker urged that a modest expenditure in the hope of making a cheap synthetic rubber from petroleum would be more economical in the end than spending hundreds of millions of dollars for the development of new rubber plantations in the tropics. The serious problem of finding a source of raw material cheap enough to allow synthetic rubber to compete with the natural product can be solved, the speaker thought, by turning to petroleum. Definite figures were given showing that four billion pounds of rubber may be made from 52,000,000 barrels of petroleum. Last year's yield of petroleum in this country was 758,000,000 barrels.

Such concrete statements as these lead the public to believe that the problem of an ample crude rubber supply can be solved as easily as turning a faucet. To many people it has always been clear that when America achieves any considerable part in the rubber plantation industry, it will be through the direct participation of the public. If through over-zealous statements about synthetic rubber or about the ease with which large plantations can be and are being established the public is convinced that the problem has disappeared, their participation will be all the harder to gain.

Bargains

IN USED RUBBER MACHINERY

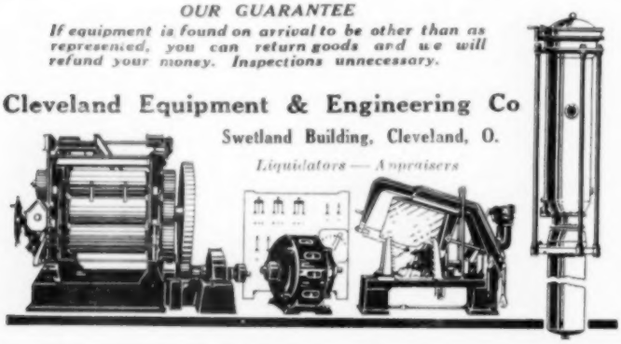
[We also Handle New Rubber Machinery and Equipment.]

When you need additional rubber machinery, think of CLEVELAND EQUIPMENT *first*. We will not only have just the equipment you want—but at the right price too.

Calendars, 60″ to 66″	Engraving Machines	Engines, Boilers
Mills, 40″, 48″, 60″	Buffers	Turbines
Banbury Mixer	Hydraulic Pumps	Motors
Bias Cutters	Presses	Generators
Vulcanizers 48″ to 72″	Trimming Machines	Laboratory Equip.
Peerless Cutter	Tubers	Other Misc. Equipment

OUR GUARANTEE

If equipment is found on arrival to be other than as represented, you can return goods and we will refund your money. Inspections unnecessary.



Cleveland Equipment & Engineering Co

Swetland Building, Cleveland, O.

Liquidators — Appraisers

Est. 1900 Inc. 1919

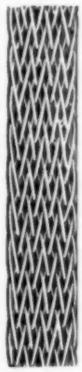
THE KUHLKE MACHINE CO.

Formerly Jones & Kuhlke

AUTOMOBILE TIRE MOLDS and CORES

GENERAL MACHINE WORK

Akron, Ohio



Perfect Beads

Entire freedom from bead trouble in the construction of straight side tires is assured by the use of either National "(Patent)" High Tensile Strength, Flat Woven, Bead Braid or our new (Pratt Patent) Bead Cables. These cables, made to dimensions specified, have seven strands, yet only one piece of wire is used without soldered, welded or brazed joint.

Write for working samples of either National flat braid or Pratt cables (no charge to tire manufacturers) and full information as to our products and service.

Our engineering department tests beads and furnishes complete confidential reports as to their stretch, set and bursting point, without charge. Inquiries solicited regarding this special service.

National Standard Company
Niles, Michigan

THE

GENERAL

CORD TIRE

—goes a long way to make friends

BUILT IN AKRON, OHIO, BY THE GENERAL TIRE & RUBBER CO.

RECLAIMED RUBBERS

UNIFORM

RED
BLACK
GREY

RELIABLE

THE DEFIANCE RUBBER COMPANY

DEFIANCE, OHIO

The New Rubber Footwear Season

In 1926-1927 the Old-Fashioned Galosh Is Reaching Its Full Development as Stylish Apparel and Promotes Much Activity

By L. N. McCabe

CURRENT TRADE reports ascribe the present activity in rubber footwear to the cleaning out of dealers' stocks by the heavy snows of last February, and anticipation of an early nard winter this year. While this element has a bearing on the situation, another important contribution to the renewed demand for rubber footwear is the development of the old fashioned galosh or overshoe into a stylish article of wearing apparel.

Analysis of the proportions of various classes of footwear in present schedules shows how gaiter demand has grown. ("Gaiter" is a technical term for overshoe of more than two buckles in height). Of the 82,078,137 pairs of rubber footwear produced in 1925, rubber shoes and overshoes accounted for 52,338,782 pairs.

The invention of the overshoe dates back to 1858 when Thomas Wales, a Boston merchant, was granted a patent for a waterproof and cold-proof overshoe, made of cloth and rubber, called the Wales patented "Aretic Gaiter". In 1863, he was granted a further patent covering a feature which overcame the tendency of the original aretic to tear apart on the upper side, especially at the edge and down the side, which device has proved immensely profitable to the manufacturing interests. This in its essential features is the present day construction of the four buckle overshoe, the pockets and gusset permitting the opening of the shoe to be widened for inserting the foot, and folding neatly together when the shoe is buckled up.

This type of gaiter had endured for years and in many ways is still the most generally useful and popular style. But as long as the women and men wore high leather shoes and boots, the demand and sale of galoshes was limited to occasions when the fall of snow was very heavy and conditions underfoot unusually bad. Light rubbers, or gum shoes as they are known in the trade, were worn in the city districts where the bulk of the population lived and consequently were made and sold in much larger volume.

With the advent of the leather oxford and the vogue of wearing low-cut shoes the year round, the gaiter came into its own, and for the last ten years has more than trebled in production, partially at the expense of the rubber. It served the double purpose of keeping the feet dry and supplying warmth and protection formerly afforded by the high cut leather shoe.

Ten years ago, college students made an important contribution to the new trend in overshoe styles, not through design but by one of those accidental happenings which give birth to new ideas and new styles. As the colleges grew and expanded, the class rooms and lecture halls of the campus became located farther and farther apart. As the time between classes was short, the students found it necessary to negotiate the distances in the shortest possible time. Buckling and unbuckling of overshoes was one of the things which could well be dispensed with, so they let them flap. The custom thus started soon became a habit, and from the colleges it spread to the world outside. The pert little misses who debonairly flitted along the street with overshoes flapping became known as "flappers", and forthwith the old-fashioned, homely, once despised galosh became a thing of fashion!

The first result which was not to the liking of the footwear manufacture was the enormous number of pairs returned for adjustment. As the feet interfered due to the rubbing of the flapping buckles, the shoes were subjected to a strain which they were not built to withstand, and cuts and abrasions from this practice were common.

But out of it all came a new era for rubber footwear. The development men in the industry saw the possibilities of the new trend, and set to work to improve the galosh and to make its popularity permanent. One of the first radical changes was marked by the appearance of the "Radio Boot" put out by the Cambridge Rubber Company. This was a miniature half-length rubber boot, trimmed with astrakan and popularized by the advertising slogan "On and off in a flash—over the shoe". It had a big run for several seasons, and similar types were put out by other manufacturers, some with snap fasteners such as used on gloves and automobile curtains taking the place of the buckles.

But the first quality worsted jersey four-buckle gaiter was still the staple along with the innovations. But suddenly there was a big rise in the wool market, and it became necessary to raise the price of the worsted gaiter. Again Cambridge Rubber Company did a little pioneering. They foresaw that the popularity of the overshoe was threatened by higher prices and set out to get a larger volume by putting out a low-priced gaiter of good quality. This was the "Glengairn" made of all cotton materials, with a black warp sateen quarter and vamp, which sold for a dollar less than the old price of the first quality four-buckle. In another year this type of shoe some made with cotton jersey and others with sateen, had captured new markets and attained record volume. Overshoes were no longer a luxury but within the reach of everyone.

The run of the "Radio" and similar type shoes taught the designers that whereas striking novelties would capture the demand the problem of fit was one that could not be over-

Items in the Goodrich 1927 line. The "Zipper" on the left, the 4-buckle overshoe on the right and the "Flash" tennis shoe in the center.

looked. The buckle adjustment of the old-fashioned four-buckle was, and still is, the best construction to insure a perfect fit round the ankle, considering that the girth of everyone's ankle is different in some degree from the rest.

The most radical and the most successful change was the adaptation of the "Hookless" fastener to the overshoe by Goodrich early in 1923. This, strange to say, was not a new idea. The fastener has been in use for years on tobacco pouches and several companies attempted to use it on overshoes as early as 1916. When Goodrich took it up in 1923, it was the cast-off waif of the rest of the industry, but after its first season the old fashioned four-buckle first—quality gaiter lost its market. The high class trade demanded "Zippers", and development departments had a new problem to produce a sliding fastener to equal the performance of the "Hookless". This particular fastener is licensed to only one manufacturer in a field.

Automatic Fasteners for Everyone

This coming winter will see a full line of automatic fastener shoes put out by the rubber footwear industry for the first time. The United States Rubber Company has the "Countess", LaCrosse, the "Lightnin"; Hood, the "Taxi"; Converse, the "Jiffy"; and Firestone, the "Faseal". It is true that the "Zipper" type of shoe affords no adjustment at the ankle, but its novelty and ease of operation has insured its success.

Not content to rest on its laurels by leading the field with the "Zipper", Goodrich has come out in the tennis line for 1927 now being sampled to the trade, with a hookless fastened canvas shoe called the "Flash".

While the designers have been working on new types of construction in overshoes, the textile specialists have improved the product by the introduction of new fabries and pleasing color schemes in overshoes. Linings which have never varied from the conventional black are now furnished in tans, and pleasing tan and white and blue and red check patterns. The light colored linings are now almost universally used in womens' rubber footwear as the blacks were apt to stain the light colored stockings now being worn so extensively.

Colors in Outside Fabrics

The outside fabrics have also felt the color trend. Worsted jerseys are being used in fawn and gray shades, and the United States Rubber Company has recently come out with a line of low-cut slide fastener overshoes carrying a tweed fabric. It is getting to the point where the lady of fashion can have a pair of overshoes to match each gown; this may sound extreme but the signs point to developments in this direction, and it means more volume for rubber footwear.

The chemist and rubber compounder has been busy matching the new shades of outside fabrics with compounds which not only attain the color desired, but wear and age properly. Inorganic colors have not generally proven satisfactory on account of their poor ageing qualities, and it has been no small problem to effect the most desired combinations of organic lakes and accelerators. There is also a firm demand for white and grey reclaims for use in rubber footwear as the result of these color tendencies.

One point that salesmen of compounding materials do not realize to the fullest extent when talking to the rubber footwear prospect is the degree of fineness necessary in footwear compounds. Whitings, for example, which are fine for mechanical and moulded goods cannot be employed at all in shoes. Footwear is not a moulded product but is cured in an open heat. Upper stocks are run as thin as 15/1000 and the slightest imperfection, piece of foreign matter, blister, or grit particle shows up glaringly in the finished product. For this reason, shoe work requires the highest grade of raw materials in upper stocks, especially on such items as zinc, lithopone, whiting, mineral rubbers, reclaims, and softeners.

With the advances and improvements in the overshoe product, it must not be supposed that development of the light rubber has been stationary. One of the problems which has continually bothered the footwear manufacturer is the rapidity of style changes in the leather shoe industry, rendering expensive last equipment, dies, etc. obsolete in a short time. To help solve this problem, Hood came out several years ago with a line of "Lastic" rubbers which have a semi-rolled edge sole which tapers off onto the upper, making one width fit a variety of lasts of leather shoes. This line has been a great boon to the small retailer enabling him to turn his stock faster and preventing losses from obsolete lasts. For the higher class trade who patronize the larger stores, the neat stylish rubbers which are designed to fit popular leather shoe lasts are still in demand, but the "Lastic" line has become a big seller.

The Style Element in Business

Styles are constantly aiding some industries and making hard times in others, so that it is natural for manufacturers to start propaganda to influence the trend in their direction. The vogue of the leather shoe oxford has long been decried by the leather men who bemoan the loss in footage from the old high cut shoes and lace boots. With the coming of the oxford, however, new markets were opened up for the rubber shoe manufacturers. Not long ago, a leather trade publication published a cut of a high lace boot for women, which came half way up the leg, saying that it was all the rage in Paris and was expected to be a coming style in this country. But no sensible person could take this prediction seriously when the element of time required to lace and unlace this shoe, and the covering up of the graceful calves and ankles, are considered. The leather oxford and the rubber gaiter styles are based on common sense and comfort, which makes them hard to change.

The growth of sports and athletics have aided rubber footwear development in many lines. Leather top lumbermen overs are popular for ski-ing, hiking, snowshoeing, and winter sports. Light-weight rubber boots for trout fishing find favor with the sportsmen, and tennis shoes or "sneakers" are widely employed on the tennis courts, baseball diamonds by youngsters, basketball floors, handball courts, and in such sports as track and lacrosse. Industrial demand has also increased; oil companies are large users of rubber boots, and many rubber shoe concerns have developed special oil-proof compounds for this work. The coal mining industry is an extensive market for heavy rubber "pacs" and boots. The farmer population, the railroad employees, and postmen, are heavy buyers of quality rubber footwear.

This brief survey shows that whereas the weather is a factor which stimulates rush demands for the rubber footwear product, the rubber shoe market has been so broadened and so developed in the last few years that profits will not depend entirely on the Lord's answer to the rubber shoe man's prayer for an early snowstorm.

The Industrial Traffic Department

The Department's Job of Delivering Goods Promptly, Safely and Cheaply Depends to the Greatest Extent on the Traffic Manager

By R. H. Goebel

Manager, Traffic Department, Rubber Ass'n of America, Inc.

THERE IS often found a lack of thorough understanding of the proper functions of an industrial traffic department, the manner in which it should operate, and the maximum usefulness to be obtained from it. In order to assist in a correct understanding of its functions, a brief discussion of the question follows.

As is the case with every department of a business, the successful functioning of the traffic department depends upon the selection of a competent manager. What are the qualifications for this type of man? The suitable manager is unquestionably one who has had thorough experience in practical traffic work in all its phases with a transportation company, preferably a railroad, and who has also given close attention to transportation law as administrated by the Interstate Commerce Commission and interpreted by the courts. With an experienced manager of these qualifications the personnel of the department can then be built up according to the requirements of the concern and will reflect the seasoned experience of its head. Too often the mistake is made in selecting a man with a limited railroad experience, and the efficiency of the department will necessarily be limited by the lack of experience of the manager.

Radical Changes in Traffic Practice

Particular stress has been laid upon securing the services of the right type of man to head the traffic department because transportation and traffic practices have radically changed during the past twenty years as a result of Federal regulation of common carriers and the interpretation of the Interstate Commerce Act by the Interstate Commerce Commission and the courts; the carriers also learned some things from Federal control during the war, especially the methods of handling rate legislation. With all of these things the traffic manager should be familiar in order to secure best results when dealing with the carriers on rate or classification problem.

Familiarity with such matters places the traffic manager in a good position to recognize favorable conditions as to the applicability of rates and classifications under the peculiar conditions often occurring during the course of business, while it also prevents mistakes being made that may prove costly to the company. Similar results are obtained by a knowledge of decisions of the courts affecting the liability of common carriers, which results in benefits to the company while preventing losses.

A thorough knowledge of the technicalities of rate construction and interpretation of the freight tariffs and classifications and the law as administered by the Interstate Commerce Commission enables the traffic manager to secure favorable adjustments in rates and recovery of overcharges in rates by the carriers. A few typical examples will illustrate the point. The traffic manager of a concern secured a reduction in the rates on coal that resulted in a saving of transportation charges of $1250.00 annually, and on the raw material consumed the charges saved by having the rate changed was approximately the same amount. On one carload shipment of finished goods an overcharge of five hundred dollars was recovered. The record of the activities of the Traffic Committee of the Rubber Association of America are replete with the savings in transportation charges of the members of the Association effected by changes in rates or prevention of changes that would entail increases in the transportation bill.

The functions of the traffic manager vary in detail in different industrial organizations. Those that are similar in all organizations are routing shipments via most economical and expeditious routes, auditing transportation bills, handling claims against carriers, and selecting or developing the best types of shipping containers. The primary purpose of the last-named function is lessening losses through breakage and pilferage, and keeping the gross weight of the package at a minimum without lessening the efficiency of the container. Where the carriers specify certain types of containers, the traffic manager must maintain constant supervision over the containers being used to avoid assessment of penalty freight charges for violation of the carriers regulations. In most establishments the traffic manager also prepares a handbook of instructions for the guidance of branches and others having contact with the transportation work of the company. These handbooks contain sample forms for use by the branches in making reports to the traffic department, as well as other detailed information.

Supervision of transportation actually should embrace all functions of transportation, from the time of shipment of raw materials to the factory until they are reshipped as finished goods and reach destination.

What Complete Transportation Means

This should include highway transportation by motor trucks (either company-owned trucks or those engaged by contract), booking steamship space for export shipments, supervision of the shipping platform, and interplant switching of cars. One large tire manufacturer places the finished goods in the hands of the traffic manager while in storage and he does not relinquish control until goods reach destination; the release of goods, however, is controlled by the distribution manager.

Certainly centralization of control in this manner makes for a smoother-working organization, eliminating possibility of friction between departments, and definitely fixes responsibility.

A very important function of the traffic department is assisting in location or relocation of warehouses or distribution points. The location of warehouses or distributing points may be selected without consultation with the traffic manager, but it will often be found afterward that if consideration had been given to the traffic questions involved, some other location would have been secured. A distributing center may be selected from the standpoint of population, car registration, rental, or any other number of factors, or the combination of all of them, but a final selection should not be made without investigating the railroad facilities from the standpoint of the number of railroads serving the locality,

the service offered by them, and the rates applying to and from that locality. All of the elements excepting transportation may be equal with those applying at some other point under consideration, but the rates to and from the second point may be more favorable, resulting in a large saving in transportation costs and consequently dictating the location of the warehouse.

Some concerns have a very narrow attitude concerning the functions of the traffic department. Their attitude is that it must pay its way, which can only be done by the recovery of freight charges improperly assessed, or the saving of expenses in the handling of freight for local distribution in large distributing centers, or by a change in rates or classification. There is a large saving effected by preventing overcharges in rates which can never be measured in dollars and cents because no record of such matters can be kept.

The larger conception of the traffic department is that it is primarily a service department, and consequently a necessity. As a service department it collaborates with the purchasing, sales, and distribution departments, always rendering assistance in keeping the industrial machine working smoothly.

The traffic manager will increase his efficiency and usefulness to his employer by constant study of transportation questions and the national economic problems involved, for example, whether the railroads of the country should be consolidated into a few large systems, and, if so, whether the consolidation should be permissive or obligatory.

Questions of this character are vital ones and the traffic manager should be in a position to advise the executives concerning them.

Rubber Factory Boilers

According to a report issued by a large New York concern and said to be based on nearly seven hundred replies received in an investigation of the use of power in the rubber industry, 18 per cent of the industry's power plant installations are fire tube boilers and 82 per cent are water tube boilers. On a capacity basis, 7 per cent are fire tube and 93 per cent are water tube.

The report shows further that 21 per cent of the fire tube boilers are from one to 10 years old, 79 per cent are 11 to 20 years old, and none of them are 21 years old or older. Of the water tube boilers, 75 per cent are from one to 10 years old, 17 per cent are from 11 to 20 years old and 8 per cent are 21 years old or older.

The Why and How of the Wickham Expedition

An intimate story of how Sir Henry Wickham came to undertake the securing of Hevea rubber seeds from the Amazon valley, the details of which are unknown to many interested in rubber today, is related by Robert Bridge in a rubber plantation machinery booklet which has just been issued by David Bridge and Son, Ltd., of Manchester, England.

According to Mr. Bridge, the attention of Sir Joseph Hooker of Kew Gardens, near London, was attracted by a sketch map appearing in a book which a Mr. H. A. Wickham had published under the title "Rough Notes on a Journey Through the Wilderness". The map showed the valley of the Amazon and indicated the locality of the plateau of the Tapajos, the original home of the plantation Hevea.

Sir Joseph Hooker, so the story continues, interested Sir Clements Markham of the India Office in the possibility of getting from the Tapajos a quantity of rubber seeds with which the practicability of cultivated rubber could be tested. Accordingly, a commission for the introduction of the "tree which produced the true Para Rubber of Commerce" was given to the author of the book, then Mr. and now Sir Henry Wickham, who was left unhampered by instructions as to ways and means.

Fortunately, the S.S. Amazonas of the Inman Line from Liverpool was on a trip up the Amazon at the time and Wickham boldly chartered the ship on behalf of the Indian Government. He assisted the Indians to gather the seeds (which were just then ripening) from the large grown trees found in the forest covering the broad plateaux dividing the Tapajos from the Madeira Rivers, and to carry them in specially prepared baskets on their backs to the River Tapajos, thence by canoe to the mouth of this river at Santarem, where he had arranged to meet the steamer.

The Latest Photograph of Sir Henry Wickham. It Shows the Veteran Explorer Holding the Paddle with which he has negotiated Thousands of Miles of Tropical Waterways.

The seeds were placed safely on board, but the ship was bound to call at Para in order to obtain clearance. If the authorities had guessed the purpose of what he had on board, the steamer would have been detained, if not interdicted altogether. The least delay would spell ruin. Accordingly, Wickham interviewed the British Consul, Mr. Green, and together they called on the Chief of the "Alfandiga" and explained that he had on board exceedingly delicate botanical specimens, specially designed for delivery to Her Britannic Majesty's own Royal Gardens at Kew.

As a result of the interview, Wickham obtained the necessary papers to sail for England immediately. Once at sea, he carefully tended the seeds, giving them all the air possible. Arriving at Havre, he was put ashore and hurried on to Kew. Sir Joseph Hooker had a night goods train to meet the S. S. Amazonas at Liverpool, and the seeds were got to Kew without delay. This was in June, 1876.

There was a great commotion at Kew. Orchid and propogating houses were cleared out to make room for the sudden and unexpected arrival of the Hevea seeds. A fortnight afterwards, the glass house afforded to Wickham the gratifying sight of tier upon tier of young Hevea plants. These seedlings were put in cases and sent to botanical gardens in the Eastern tropics, mainly to Ceylon. The trees grew larger and larger, yet for over twenty years planters took very little notice of them. Everybody in the trade knows what has happened since.

World Trade in Mechanical Goods

In the International Commerce in Rubber Belting, Hose and Packing, the United States Leads Desp ite Severe Competition

THE INTERNATIONAL trade in mechanical rubber goods, or technical rubber goods as they are called in Europe, reached approximately the following totals in 1925:

	Pounds	Value
Rubber and Balata Belting	11,000,000	$ 7,500,000
Rubber Hose and Tubing	13,500,000	5,500,000
Rubber Packing	7,000,000	3,500,000
Total Trade	31,500,000	$16,500,000

For countries where statistics showing the value of the trade are not available, that value may be roughly estimated at 50 cents per pound of mechanical rubber goods imported.

The United States rubber belting exports are greater than those of any other country, constituting about 37 per cent of the total exports of rubber and balata belting from all countries in 1925. United Kingdom exports rank second in this class of belting, about 25 per cent of the total. The British exports consist of approximately equal quantities of rubber belting and balata belting, while American exports are almost wholly rubber belting. Other countries competing in this trade on an important scale are Canada, Germany, France, Czechoslovakia, Norway, and Belguim, and among these countries the exports of rubber belting from Canada have increased most rapidly in recent years, constituting nearly 11 per cent of the 1925 total. A large part of the exports from Germany, Czechoslovakia, Norway, and Belgium is balata belting.

The following table shows the quantity of rubber and balata belting exported from the chief manufacturing countries in recent years. The volume of trade has increased steadily each year and in 1925 exceeded 11,000,000 pounds weight with an estimated value of $7,500,000.

EXPORTS OF RUBBER AND BALATA BELTING

From	Thousands of Pounds			
	1922	1923	1924	1925
United States	2,585	3,548	3,577	4,079
United Kingdom	2,371	2,650	2,659	2,881
Canada	321	450	702	1,213
Germany	644	851	528	703
France	580[1]	680[1]	960[1]	909[1]
Czechoslovakia	103	560	525	500[1]
Norway	160	240	250	333
Belgium	250	300[1]	425[1]	352
Sweden	90	119	100	105
Italy	30	65	24	50
Austria	26	16	6	8
Total	7,160	9,479	9,756	11,133

[1]Estimated: France at 20 per cent of total weight French exports of mechanical rubber goods; Czechoslovakia for 1925 estimated basis two preceding years; Belgium exports first officially reported last 2 months 1924.

During both 1923 and 1924, the total annual exports of all kinds of machinery belting (rubber, balata, leather, woven hair, and cotton) from all countries amounted to between 25,000,000 and 26,000,000 pounds. In 1924 around 35 per cent of the total was rubber and balata belting, about 35 per cent woven hair and cotton, and 30 per cent leather belting.

The United Kingdom leads all other countries in annual exports of machinery belting, supplying about 41 per cent of the total in 1924. British exporters are strongest in the woven hair and cotton belting, which constitutes, by weight, over half of their total exports. Germany is the principal competitor of the United Kingdom in this trade; the cotton belting exports from the United States are of minor importance. The United Kingdom is also the dominating factor in the leather belting export trade, although there is severe competition from American, French, Belgian, German, Austrian, Dutch, and other exporters.

The international trade in rubber hose is more largely concentrated in the hands of manufacturers in a few countries than in the case of the rubber and balata belting trade. The United States now leads in the hose trade by a fairly good margin, with Germany as strongest competitor, followed by United Kingdom, France, Austria, Canada, Italy, Australia, and Belgium. American rubber manufacturers who have constantly transferred belting export business to Canadian plants have not followed this practice so extensively in the case of hose, but the Canadian trade is nevertheless steadily growing.

EXPORTS OF RUBBER HOSE AND TUBING

From	Thousands of Pounds			
	1922	1923	1924	1925
United States	3,381	4,456	4,428	5,349
Germany	4,058	3,668	3,175	3,306
United Kingdom	1,068	1,075	1,505	1,705
France	871[1]	1,028[1]	1,442[1]	1,364[1]
Austria	262	669	500	585
Canada	301[1]	311[1]	393[1]	542[1]
Italy	437	171	219	456
Australia	205[1]	225[1]	248[1]	225[1]
belgium	100[1]	100[1]	100[1]	149
Total	10,683	11,703	12,005	13,681

[1]Estimated: France at 30 per cent of total weight French exports of mechanical rubber goods, Canada on basis of value of Canadian exports, Australia on basis of value New Zealand imports from Australia except for 1925, Belgian exports first officially reported for 1925.

The total volume of hose exports in 1925 is estimated at over 13,500,000 pounds valued at about $5,500,000, the United States supplying 39 per cent, Germany 24 per cent and United Kingdom 12.4 per cent. The table just above shows annual exports from the chief manufacturing countries in recent years.

One of the potent factors aiding American exporters to increase exports of garden hose, the most important type, was the early American development of long length hose, while the more recent campaign of standardization on ⅝ inch hose has also had some effect. American exporters of gasoline filling station hose also dominate export trade in that line. European manufacturers are understood to control the bulk of the fire hose trade.

Definite and comparable statistics of exports of rubber packing are not published in official trade returns of most foreign countries. The United States statistics of rubber packing exports include packing, gaskets, valves, washers, etc., wholly or mainly of rubber. British statistics of packing exports cover all kinds of "engine and boiler packing, except asbestos". French statistics of packing exports are not separately reported. German statistics cover piston and stuffing box packings and packing ropes of rubber, but apparently do not include sheet packings. Austrian statistics include rubber and asbestos packings and jointings, and the Belgian statistics for 1925 include gaskets, valves, and sheet packings of rubber. There are no separate statistics of Canadian exports of packing.

The table on the next page shows annual exports of packing of the kinds specified from various countries from 1922 to 1925. Indications are that the total trade amounted to about 7,000,000 pounds in 1925 and that the 1925 value was about $3,500,000. While the trade in belting and hose is much more important than that in packing, nevertheless the latter is worth competing for. Unfortunately, export sales of packing have not grown as rapidly as those of rubber belting and hose, as may be seen by a comparison of the tables.

Abstracted from the introduction to the mechanical rubber goods manual recently issued by the Rubber Division, U. S. Department of Commerce, for the assistance of American manufacturers of rubber belting, hose and packing.

EXPORTS OF MACHINERY PACKING

Thousands of Pounds

From	1922	1923	1924	1925
United States	1,149	1,546	1,885	1,915
United Kingdom	1,777	2,467	2,734	(a)
Germany	1,953	1,063	751	684
Austria	(a)	1,766	1,484	1,561
Belgium	(a)	(a)	(a)	53
Total		6,842	6,854	

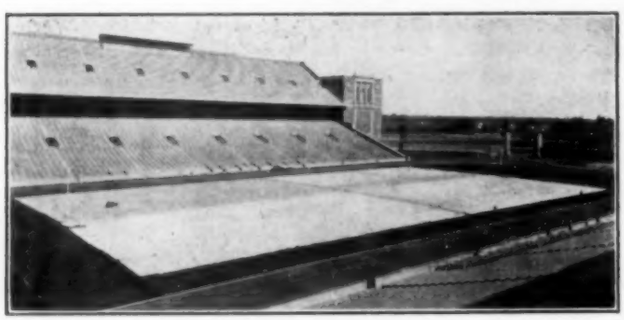
(a) Official statistics not available.

While individual manufacturers occasionally specialize in the manufacture of a single class of mechanical rubber goods, the general practice of manufacturers who produce hose or belting is to also produce packings, and vice versa. The distribution of these products, in the main, follows similar channels. The trade is technical in character, and it is not easy to locate foreign distributors who have the necessary technical experience, as well as the trade connections and financial backing required to make them desirable representatives for large American exporters. Accordingly, the larger exporters, whether American, British or German, usually operate through factory branch offices in important markets like Argentina, South Africa, Australia, Chile, Mexico, or British India. The practicability of using this method depends of course on the prospective volume of business, but unless exceptionally able distributors can be secured in a market, the branch office plan is the best method of maintaining an assured position. Only leading manufacturers who have comparatively complete lines can practice this form of distribution.

Small manufacturers generally secure representation abroad, and large manufacturers also in markets too small to justify a branch office, through general agencies granted to wholesale distributors who sell to retailers in the same manner as the branch office. Usually the best distributors are to be found among the large mill supply houses and importers handling light industrial machinery. Hardware wholesalers are important distributors in several medium-sized and small markets, and in some countries general trading companies handle the trade in mechanical rubber goods.

As a usual thing, the customs duties levied on mechanical rubber goods imported into foreign markets are reasonable, and though often high enough to afford some protection to domestic manufacturers, preferential rates are seldom of sufficient importance to influence the source of imports. Some of the British dominions grant lower rates to United Kingdom and Canada than to the United States, and most important French dominions grant free entry to French products, but tariff rates have less influence on the trade in mechanical rubber goods than on the trade in tires and rubber footwear.

World's Largest "Raincoat" is "Worn" by Gridiron



Rubberized Gridiron Cover in Place in Illinois Stadium

After one of the big football games last fall a famous football coach was heard to remark, "That wasn't a football game! It was nothing more than a gamble! We got the luckiest break out there in that sea of mud."

It was to eliminate such playing conditions as that under which the game in question was fought out that the Rubber Products Section of E. I. du Pont de Nemours and Company at Fairfield, Conn., developed a fabric for use in protecting gridirons. The largest "raincoat" in the world is now worn by the gridiron at the University of Illinois. The material was adopted by George Huff, director of physical welfare, only after severe tests had proved it superior to any other in resisting the wear and weather to which such a cover would be subjected.

The cover is made of a heavy canvas throughly impregnated and coated with a special rubber compound that not only makes the fabric absolutely water proof, but renders it resistant to fungous growth to prevent it from becoming moldy or mildewed when rolled up and not in use. It is made in four sections, each measuring 158 by 83 feet to cover the field lengthwise and across. The total area covered by the four sections measures over 582 square yards, which is considerably larger than the playing field, and, therefore, will protect the ground behind the goal line as well as that along the side lines.

Along the edges of each section a one-half inch hemp rope, treated to render it water and fungus proof, is built in. The rope offers gripping places for use when the cover is being laid on or taken off the field. All the thread used in sewing the cover was also fungus-resistant and water-proof, and the seams were lapped and cemented as well as sewed to make them absolutely water-tight.

The cover, which is fashioned to fit around the goal posts, not only protects the field from rain and snow but keeps the covered portions warmer than other ground, and thus tends to prevent it from freezing.

The athletic officials of several other universities are said to be contemplating the adoption of Du Pont Field Cover Cloths.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, of THE RUBBER AGE published semi-monthly at Highland, New York, for October 1, 1926.

State of New York
County of New York } ss.

Before me, a notary public in and for the State and county aforesaid, personally appeared P. L. Palmerton, who having been duly sworn according to law, deposes and says that he is the Editor of THE RUBBER AGE and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher Palmerton Publishing Company, Inc., 225 Fourth Ave., New York City; Editor P. L. Palmerton, 225 Fourth Avenue, New York City; Managing Editor None; Business Manager Peter P. Pinto, 225 Fourth Avenue, New York City.

2. That the owner is, (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given).

Palmerton Publishing Company, Inc., 225 Fourth Ave., New York City; P. L. Palmerton, 225 Fourth Ave., New York City; Gardner Publishing Co., 225 Fourth Ave., New York City.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are:

None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

P. L. Palmerton, Editor.

Sworn to and subscribed before me this 30th day of September, 1926
[Seal] FREDERICK C. ZIMMERLI. Notary Public.
(My commission expires March 30, 1928.)

The London Letter

The GENTLEMAN FROM MINCING LANE will report current opinion in London's famous rubber market in every issue of THE RUBBER AGE

The Gentleman Says "Now For the Post-Graduate Course"

LONDON, October 15, 1926.

ONCE AGAIN we approach the end of a rubber Quarter, this one, ending October 31st, being the last in the fourth year of the Stevenson Scheme. Four years usually constitute a college course. Has the rubber growing industry learned anything in these four years? As Mr. Baldwin said in a speech last week, referring to the British coal impasse of the past six months,—"The question is; are we going to have the wisdom to learn?" Then again, has the rubber consuming industry learned anything from this four years course designed by Professor Stevenson?

All signs point to the fact that the results of the four years course have been so to the liking of those who prepared the varying curricular that at least one post graduate year will be arranged, with more new courses, and a grading of the class above and below 80%, and other changes to come later as appears desirable.

Getting serious again, everything seems to point to another cut in the quota from November 1st on. Unrestricted export from British estates from Feb. 1, 1926, to Nov. 1, 1926, is thought to have more than remedied the upset situation which prevailed from June, 1925, to the end of the year.

October has seen a further expansion of production and export, and also of consumption, but with August prices averaging 19.465d and September 20.197d; and the prices for the 77 working days up to October 8th averaging 20.75d, the remaining 18 working days must average over 24d if the price for the Quarter is to be even a thousandth pence over 21d.

Therefore the question of unused coupons becomes more and more important when we consider the year end position as regards the abundance or scarcity of the raw material. It is possible that the unused coupons may entirely wipe out the November 1 cut but conservative guesses in London seem to point to a reduction to 86% or 87% of standard production, compared to 92% maintained thus far this year.

ALSO THE latest guess is that an announcement will be made October 31st or thereabouts as to the intentions of the Colonial Office for the next Quarter and following Quarters—whether unused coupons will be usable in the November-January Quarter, and the residue then cancelled, or what not. Also just what can be expected in the following Quarters in case the pivotal price of 1/9d is exceeded or not. The producing Companies evidently expect a restriction in the future use of unused coupons, as all the rubber they can get out within the limits of their more conservative tapping programmes is being exported in anticipation of such an event.

There has been some talk of a shortening of the quarterly period, and an attempt to make changes every month or two months. Growing interests object to this shortened period because of the difficulty in hiring labour in the Far East on short notice.

The situation is exceedingly interesting, supply and consumption are both running neck to neck into high figures, and unless the Colonial Office announces a new drastic scheme the first of the month, it would appear that the immediate situation is not unfavourable to rubber consumers.

A rather amusing article appears in "The Bulletin" of the Rubber Growers' Association, for September, written by James Fairbairn, a leading Director of Rubber Growing Companies, who deals with the subject of propaganda for the increased use of rubber, and points out what he thinks should be the best line of attack.

> "Firstly, a serious endeavour should be made to find some other great new use which would absorb rubber in such quantities as the tire industry does today; and secondly, endeavours should be made to increase the percentage of rubber used in Great Britain and other parts of the world, thus lowering the percentage of raw rubber going to America."

I WONDER what would have been the result if this policy of Mr. Fairbairn had been adumbrated, and could have been successfully instituted, two years ago. If the American consumption of raw rubber produced on his estates had not substantially increased, what would be the status of his dividends today?

Dunlops, and the shares in some of the other companies connected with the tire business, have slipped back a trifle in consequence of the reported cut in the quotations for tires. Such a reaction is not particularly surprising in view of the bull account that has been built up in Dunlop shares. The bull account is not one of those which is particularly prominent in the market. It consists more of the hundreds of holders of comparatively small numbers of shares who have bought on the expectation of seeing Dunlops go still higher, but who are rendered a little nervous by any slight dullness that overtakes their market. Nobody would say that Dunlops are worth their price on their dividend record; the yield now is only about 3½%.

London is quite accustomed to the announcements of high dividends on rubber shares, but Harrisons and Crosfield results are particularly interesting as they are one of the largest and best managed of the London Companies, and Eric Miller's own concern. Net profits have improved by over 22%, general reserve has been increased to £500,000, dividends on deferred shares have increased to 172% and management share to 276%. The total assets have been increased by nearly £275,000 to over £3,800,000,—a very strong financial position taking it all in all.

Your Faithfully,
THE GENTLEMAN FROM MINCING LANE.

WE offer a service of practical experience for the purchase or sale of crude rubber on a commission basis.

We also offer comprehensive facilities to all users of and dealers in rubber for covering their requirements and hedging their commitments by contracts for the future delivery of rubber on the Rubber Exchange of New York, Inc.

Messrs. Harriss, Irby & Vose, of New York, are our clearing brokers.

Correspondence invited.

HENDERSON BROTHERS & CO., Inc.
BROKERS IN CRUDE RUBBER
New York Office — 60 BEAVER ST.
Akron Office — OHIO BUILDING

H. H. Henderson, *Pres.*
H. M. Henderson, *Vice-Pres. & Treas.*
M. C. McComas, *Secy.*
Telephones Whitehall 9630 9631 9632 9633

Members Rubber Exchange of N. Y., Inc.
Cable Address—Harhenbro, New York

Charles T. Wilson Co., Inc.
82 Beaver Street New York

Importers of

CRUDE RUBBER

Members Rubber Exchange of New York, Inc.
Members Rubber Exchange Clearing House, Inc.

AKRON OFFICE: 507 Second National Bldg.
Telephone Main 3799

HENDERSON, HELM & CO., INC.
44 Beaver Street
New York City

Importers - **CRUDE RUBBER** - Dealers

Specializing in RUBBER FUTURES
on the RUBBER EXCHANGE

MEMBERS
THE RUBBER EXCHANGE OF NEW YORK
THE RUBBER EXCHANGE CLEARING HOUSE

Telephone: Bowling Green 6200

WEEKLY MARKET REVIEW ON REQUEST

Rubber Production and Trade

SAYS PATH NOW CLEAR FOR LIBERIAN PROJECT

With Obstacles Removed, Firestone Forsees Important Rubber Development in Africa—Less Favorable View Expressed in Detailed Newspaper Story.

In discussing a London cable expressing British opinions that the Liberian project of the Firestone Rubber Plantations Company must be considered "as a serious proposition," H. S. Firestone, president, has pointed out that troublesome difficulties have been overcome and development of the project in the future should be unhampered.

"Seven months ago the future of our Liberian plantation was in doubt," Mr. Firestone is said to have admitted. "Government difficulties had arisen which left the success of the project largely in the hands of fate. Since that time an agreement suitable to the Liberian administration and the Firestone Plantations has been worked out and there are now no further bars toward development of the 1,000,000 acres which the company holds in the negro republic."

In spite of the fact that as yet little expansion has been made to the 1,200 acre Hevea plantation which was taken over, Mr. Firestone feels that by 1930 the plantation will be an important factor in the world's rubber production and by 1935, a factor to be reckoned with in the world's rubber market.

A less favorable view of the Liberian project is taken by an anonymous gentleman who recently expressed his opinions in the *New York Commercial* and told the "inside" story as follows:

"The Liberian Government during the Great War was voted a loan of approximately $5,000,000 by the United States Government. The war ended before the loan was made. Consequently, the Government of Liberia is of the opinion that the United States owes it $5,000,000, whereas in fact it is indebted to the United States to the extent of $26,000 for other services.

"Representatives of the Liberian Government have been in the United States. They approached a man prominent in the rubber industry, and he is said to have rejected their proposal, which was that large land concessions would be granted to the organization that could re-open negotiations with the Government at Washington and secure the $5,000,000 loan for the African republic. It is understood that Mr. Firestone made such a gesture, and consequently an announcement was made to the effect that the Firestone Tire and Rubber Company of Akron, Ohio, would develop plantations in Liberia.

Difficulties in the Way

"Firestone, it is said, was unable to secure the $5,000,000 loan from the United States Government. Our informant states that he went into the matter thoroughly and was informed by the Treasury Department that the loan to the African Republic was not to be made, since the war has ended.

"In the meantime, Mr. Firestone has turned his eyes toward the Philippines, and this summer was a guest at the Summer White House. The subject discussed is said to have been rubber and the possibility of its development in the Philippine Islands, from whence it is possible the United States may yet get its supply."

While the statement just quoted has received considerable attention, many of the facts appear to lack confirmation. It was not Mr. Firestone, Sr., for instance, who visited President Coolidge recently, but his son, H. S. Firestone, Jr. When the latter visited the President he had just returned from the Philippines and had not yet inspected the Liberian property. He is now in Liberia.

PREPARE GUIDE BOOK FOR RUBBER PLANTERS

As a part of its campaign to encourage Philippine agriculturists, both large and small, to take up rubber growing, the Bureau of Agriculture of the Philippine Islands has issued a brief, simple-language booklet telling how to plant, care for and harvest hevea rubber. The publication is thoroughly admirable in that it is definite, brief and comprehensive, and it is expected that it will influence many farmers in the islands to include rubber in their future planting programs.

After a brief history of the rubber industry and a discussion of varieties leading to the conclusion that hevea alone should be planted, the author, Jose S. Camus, treats the selection of plantation sites, preparation of the land, methods of planting, planting distances, cultivation, diseases and pests, and finally, harvesting. Probable yields and productions costs are discussed.

One great virtue of the booklet lies in its profuse and excellent illustrations. There are sixteen full-page pictures of trees, seedlings, nurseries, implements and various grades of rubber. The illustrations are of considerable aid in the obvious effort to prepare a guide book for rubber planters whose previous experience in agriculture has been elementary.

To Make Mineral Rubber

The Lion Oil Refining Company contemplates the erection of a plant at El Dorado in the Smackover oil field for the manufacture of mineral rubber from waste oil products. It is estimated that the plant will cost $375,000 and will handle about 500 barrels daily. Chemists have reported that products of the Smackover field are particularly adaptable for the manufacture of mineral rubber in connection for its use for hard rubber goods.

State Dept. of Republic of Liberia, Monrovia

Broad Street in Monrovia, Liberia

Caution Displayed in Rubber Trading

Crude Rubber Market Resists Effect of Bearish Reports After a Temporary Halt and Resumes its Upward Movement

NEW YORK, Oct. 19, 1926—On quite a few days during the past two weeks fear played a stellar role in the crude rubber market, and the expectation of large September imports caused traders to display caution and held sales down to a minimum. In fact, almost an entire week was spent in waiting and there was relatively little life in the market. As a result the market halted its climb and began sliding back, but traders were optimistic that the condition was only temporary and blamed the lack of stimulating advices from abroad for the slump.

It was said that manufacturers were inquiring for larger quantities and it was predicted that with the first definite information regarding the prospects for restriction in the next quarter beginning Nov. 1, prices would resume their upward trend. During this waiting period London cables were practically colorless and utterly failed to have any stimulating effect on New York trading. Bullish ring sentiment, however, was encouraged by a fairly definite rumor that the British Colonial Office was about to cancel coupons and reassess some estates' allowance. It was also pointed out that with present world consumption, a central stock in London of between 35,000 and 50,000 tons is almost a necessity. Steady increases in the London stock over the next two months or so were said to be very likely.

Estimates placing imports into the United States during September at 38,000 tons for all ports and consumption at from 28,500 to 32,000 tons did not have a favorable reaction on the market, but Rubber Association statistics showing that inventories of tires declined in August in spite of a record production were considered bullish. When the Rubber Association rubber import statement for September was released, an apparently irreconcilable difference between imports, consumption and stocks created further uncertainty in the market. Imports for September were 38,132 tons and consumption was 32,900 tons, presumably leaving 5,232 tons to be added to stock. However, the report showed only 1,208 tons added.

An upward trend started on Oct. 14 by the Rubber Association reports continued during the next few days. Spot rubber moved up to 43 cents and October, which had been selling at a considerable discount under actual spot, was not to be bought below 42⅞ in the outside market. Closing the week with net gains of 80 to 110 points, the market thus recovered all it had lost in the previous week. Toward the close of the week attention was drawn from the perplexing unused coupon matter and focused upon the probable needs of tire manufacturers who had reentered the market for spot and nearby deliveries after a long absence. As a result, the neglected October on the Exchange became the leader in activity and was on a parity with spot.

OCT. 2 OPEN MARKET PRICES

Plantations—			
Ribbed Smoked Sheets			
Spot	.42⅜	@	—
October	.42⅜	@	—
November	.43⅛	@	—
December	.43⅜	@	—
Jan./Mar.	.44¼	@	—
First Latex, crepe spot	.42⅞	@	—
Amber Crepe, No. 2, spot	.41	@	—
" " No. 3	.40½	@	—
" " No. 4	.41¼	@	—
Brown Crepe, Rolled	.36½	@	—
" " Clean, thin	.40¾	@	—
" " Specky	.39½	@	—
Pontianac—			
Bangermassin	.16	@	.17½
Palembang	Nominal		
Prime Pressed	.27¾	@	—
Sarawak	.17½	@	—
Paras—			
Up-river Fine	.37½	@	.38½
" Medium	.31½	@	33
" Coarse	.27	@	.28½
Acre Bolivian, fine	.38½	@	.39½
Tapajos, fine	.37	@	.38
Islands, fine	.32	@	.33
Cut Beni Bolivian, fine	.39½	@	.40½
Caucho Ball—			
Upper, shipment	.27	@	.28½
Centrals—			
Corinto, scrap	.26	@	.28½
Esmeraldo, sausage	.26	@	—
Guayule, w and d	.29	@	.33½
Africans—			
Benguela, No. 2	Nominal		
Congo, upper, black	Nominal		
" " red	Nominal		
Kassai, Prime Red	Nominal		
Balata—			
Block, Columbia	Nominal		
" Caidal	.47	@	.48
Surinam, sheet	.74	@	.75
Gutta Percha—			
Siak	.32	@	.33
Red Macassar	3.00	@	3.50
Chicle—			
Mexican, Yucatan	.65	@	—

LONDON MARKET

Standard Ribbed Smoked Sheets—*Buyers*	
Spot	21⅛d
Oct.	21⅛
December	21½
Jan./March	22
April/June	22½

SINGAPORE MARKET

Standard Ribbed Smoked Sheets—*Sellers*	
Spot	20½d
Nov./Dec.	20⅞
Jan./Mar.	21½

RECLAIMED RUBBER

NEW YORK, Oct. 18, 1926—Demand for reclaimed rubber from both tire and footwear factories is reported to be steady, and it is expected that the firmer tone of the crude rubber market will soon have a result in stronger prices for reclaims. Super-reclaim No. 1 has already risen a fraction of a cent a pound, but prices of other grades are practically unchanged since our last report. Business at this season is said to be much better than it was in 1925.

High Tensile Black			
Super-Reclaim No. 1 ..lb.	.19	@	.20
" " No. 2 ..lb.	.16	@	.17
Shoe			
Unwashed .....lb.	.08¾	@	.09
Washed .....lb.	.11¾	@	.12¼
Tube			
No. 1 (Floating) .....lb.	.18	@	21
No. 2 (Compounded) ..lb.	.15½	@	.16½
Tires			
Black, unwashed .....lb.	.09	@	.10
Black, washed .....lb.	.11	@	.11¼
Black selected tires ..lb.	.10½	@	.11
Dark Gray .....lb.	.12	@	.14
Light Gray .....lb.	.15	@	16
White .....lb.	.17	@	.17½
Truck, Heavy Gravity ..lb.	.08¾	@	.09½
" Light Gravity ..lb.	.09¾	@	.10¼
Miscellaneous			
Mechanical Blends ....lb.	.08	@	.09
Red, High Grade .....lb.	.17½	@	.18½

SCRAP RUBBER

NEW YORK, Oct. 18, 1926—A fairly active market for scrap rubber during the past two weeks was reported by dealers. There has been plenty of trading at current price levels, due, perhaps, to the expectation of higher prices in the near future. Mixed tires have already been increased $2.00 a ton. The prices of most grades, however have been fairly steady.

[Prices to Consumer]

Auto tire peelings .....ton	35.00	@	36.00
Standard White auto ....ton	47.50	@	50.00
Mixed auto .....ton	27.00	@	28.00
Bicycle tires .....ton	24.00	@	25.00
Clean solid truck tires ... ton	40.00	@	42.00
Boots and shoes	.02⅜	@	.02½
Arctics, untrimmed	.01¼	@	.01⅜
Arctics, trimmed	.01	@	.01⅛
Inner tubes, No. 1	.09½	@	.09½
Inner tubes, No. 2, compounded	.07¾	@	.08
Air Brake Hose .....ton	30.00	@	32.00
Rubber hose .....ton	21.00	@	23.00

Closing Prices on Rubber Exchange of New York, Inc.

OCT. 4 TO 16

		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	SALES*
Oct.	4	42.60	43.40	43.80	44.10	44.30	44.50	44.60	44.60	44.80	44.80	45.00	45.10	281
	5	42.50	43.00	43.40	43.60	44.00	44.40	44.50	44.60	44.70	44.80	45.10	45.40	157
	6	42.40	42.80	43.30	43.50	43.80	44.00	44.10	44.30	44.50	44.70	44.80	45.00	187
	7	42.30	42.50	42.90	43.20	43.50	43.70	43.90	44.10	44.30	44.50	44.70	44.90	186
	8	42.00	42.40	42.80	43.10	43.30	43.40	43.60	43.80	43.90	44.10	44.30	44.50	307
	9	42.00	42.60	42.90	43.10	43.30	43.40	43.60	43.80	43.90	44.10	44.30	44.50	61
	11	42.20	42.80	43.20	43.30	43.40	43.70	43.90	44.20	44.30	44.50	44.60	44.80	10
	12	Exchange closed in observance of Columbus Day.												
	13	42.00	42.60	43.00	43.10	43.30	43.50	43.70	44.00	44.20	44.40	44.50	44.70	40
	14	42.20	42.80	43.20	43.40	43.50	44.00	44.20	44.40	44.60	44.80	45.10	45.30	223
	15	42.50	43.20	43.70	43.80	44.10	44.40	44.50	44.60	44.80	45.00	45.20	45.40	106
	16	42.70	43.20	43.60	43.90	44.10	44.30	44.60	44.80	44.80	44.90	45.10	45.30	50

(*) In lots of 2½ tons each: totals are for old and new contracts.
(Prices are for new contracts)

Rubber Chemistry and Chemicals

Many Merits Claimed for New Accelerator

Product of Semi-Ultra Type, Developed by Rubber Service Laboratories and Called Z-88, Decreases Curing Expense

THE MERITS of short versus long periods of vulcanization are generally recognized and the limit is being steadily reduced. It was not so long ago that Ford-size tires took three hours to vulcanize. A curing time of 30 minutes is now possible. Improvement in the quality of rubber goods has also been marked in the last 10 years, of which a notable example is the cord tire. But the greater mileage given by tires of this type are not to be wholly attributed to the advantages cord fabric enjoy over square woven. The introduction of large quantities of carbon black in tread compounds and the application of organic accelerators have had much to do with the great increase in life and reduction in cost as the fabric itself.

From the beginning of accelerator development, improvement of physical properties was the principal consideration. Today over 450 organic accelerators are known. It was found that by proper adjustment of sulphur and accelerator ratios, choice of the proper activator and common sense regulation of curing conditions that a marked increase in quality was obtainable. This led to greater activity in accelerator research and new discoveries.

Formerly vulcanizing processes had to be arranged to suit the accelerator. As the activity in accelerator research progressed, new compounds were brought out, the field was widened and substances were found possessing all sorts of accelerating properties. It is well-known that short periods of vulcanization have had much to do with the improvement in life of both rubber and fabric and that vulcanization at low temperature is advantageous.

The Rubber Service Laboratories Company, Akron, has recently developed and placed on the market what is called a semi-ultra accelerator, known as Z-88. In critical time and temperature it is said to come about halfway between the A-19 and ultra groups. Its critical temperature is low enough to permit comparatively slow cures and its critical time is long enough to allow safe handling in the factory with a few reasonable precautions. Curing time with this accelerator is short—about 30 minutes for a 30x3½ or 29x4.40 tire. The most satisfactory curing temperature is that of 30 lbs. steam (274°F.)

With Z-88 it is said to be possible to obtain practically double the usual turnover of molds, which means a saving in curing labor of not less than 25 per cent with the same curing room overhead. This saving is not made at the expense of quality. Sufficient work has already been done with Z-88 to show conclusively that it is a practical accelerator which may be adapted to present factory practice with little alteration or expense.

Considerable work has been done with the Bierer-Davis Oxygen Bomb and the Geer Oven, and both accelerated ageing tests indicate that Z-88 ages perfectly.

It has been found that from 2.5 per cent sulphur on the rubber and from 1 to 1.5 per cent Z-88 are the proper ratios. When considerable softeners are present, somewhat higher sulphur ratios may be desirable. But as a usual thing high accelerator and low sulphur give best results. Although Z-88 gives good results when vulcanized at almost any temperature, it is to be noted that better effects are obtainable when actual curing temperatures in the articles themselves—not in the heater or press—correspond to that of 30 lbs. steam or less.

It is said that Z-88 works very well in dry heat cures. In pressure vacuum or normal hot air cures, good results are obtainable. This is of particular interest in curing footwear, spread goods and dipped goods. It also gives very fine effects with colors. In the vulcanization of rubber lining for acid-proof tanks where curing had to be done in boiling water Z-88 was used successfully, and it also gave good results with reclaims.

E-Z-Mold Softener

A new rubber softener has been introduced under the name "E-Z-Mold", by the Mackey Products Co., Cleveland, O. This softener differs from Moldrite, the other softener marketed by this concern, in that it is used only for black stocks for hard or soft rubber products whereas Moldrite is suggested for pigmented stocks.

E-Z-Mold was developed to take care of changed compounding conditions in the rubber industry in the last few years during which period larger quantities of reclaimed rubber have been utilized in stocks. It is claimed to prevent hardening, scorching, shrinking, blistering, blooming and to assist in doing away with priming of molds.

Achelis Left $210,000

The will of Frederic G. Achelis, late president of the American Hard Rubber Company, New York, admitted recently to probate by Judge Stephen L. Radford in Greenwich, Conn., shows that he left real estate valued at over $110,000 and personal property estimated at over $100,000. Mrs. Helen B. Achelis, the widow, and three children, Audrey, Frederic and Gertrude, receive the bulk of the estate. Frank D. Hendrickson, a brother-in-law, receives 2 per cent of the value of the property, real and personal, and shares in one-fourth of the rest. Mr. Hendrickson and Mrs. Achelis are named as executors.

Frederic G. Achelis died at his home in Round Hill, Greenwich, on September 18.

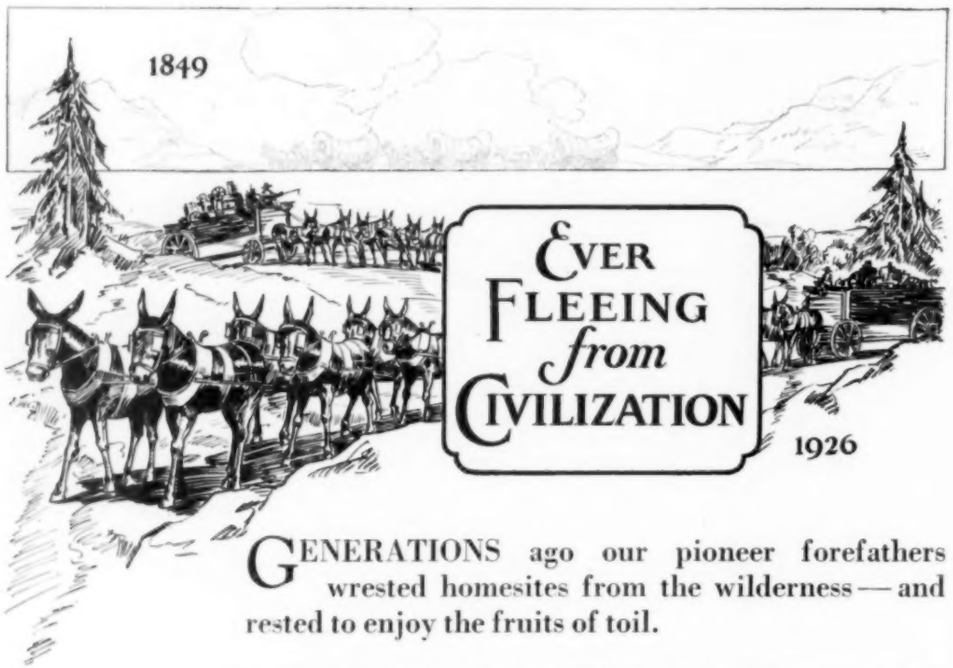
Fluxrite No. 4½ Softener

An additional grade of Fluxrite softener was recently announced in Fluxrite No. 4½, manufactured by the Damascus Manufacturing Corp., Cleveland, O. This new grade is black and solid while No. 2 is a transparent brown and solid; No. 3 is a liquid, light amber in color; No. 4 is a dark liquid and No. 5 is a liquid of amber color high in stearates.

Fluxrite is a blended vegetable and petroleum oil which adds to the ageing quality of rubber stocks in addition to improving their appearance and facilitating easy separation of rubber and mold.

Goodyear University Popular

The registrar of Goodyear Industrial University maintained for its employees by the Goodyear Tire and Rubber Company at Akron, has announced that the total number of students who will be taking work at the University this fall is 1,115.



GENERATIONS ago our pioneer forefathers wrested homesites from the wilderness — and rested to enjoy the fruits of toil.

Generations ago Carbon Black Manufacturers established factories, laid miles of pipe in the wilderness — and found all too soon that civilization had caught up with them and was offering more for natural gas than the price of carbon black permitted them to pay.

Instead of stopping to enjoy the fruits of their toil these manufacturers continually have had to flee from civilization and scrap both machinery and pipe lines.

Leaders in this movement and pioneers in the costly prospecting, needed each year from the first, have been the firm of Godfrey L. Cabot, Inc.

This Company feels that any move to insure the fulfilment at reasonable prices of their customers' requirements, is a good move and well worth while.

CARBON BLACK

GODFREY L. CABOT, INC.

940 OLD SOUTH BUILDING, BOSTON.

TALK WITHOUT ACTION DEPLORED BY WIERMAN

Samuel Wierman Talks on Crude Rubber Production and W. B. Wiegand on Compounding at Meeting held Under Auspices of American Chemical Society in N. Y.

Speaking at a meeting at the Chemists' Club in New York on the evening of Oct. 8, Samuel Wierman, whose contract as a crude rubber production expert for the Firestone Tire and Rubber Company recently expired, predicted that the next 10 years would see a shortage of crude rubber and contended that the situation was made worse instead of better by talk about important plantation projects which never develop. Dr. W. B. Wiegand, of the Binney and Smith Company, New York, also delivered an interesting address on conservation through rubber compounding.

The meeting, which was held under the auspices of the New York Section of the American Chemical Society, was an outgrowth of the recent Crude Rubber Symposium. It was participated in by the New York Section of the American Electrochemical Society, and the American Sections of both the Society of Chemical Industry and the Societe de Chimie Industrielle.

Mr. Wierman, whose topic was "The Possibilities of Increasing Crude Rubber Production", is recognized as an expert on the growing of rubber, for he has conducted explorations and surveys in all the important rubber growing areas of the world, including the Middle East, Philippines, Central America, Mexico and Africa. From 1907 to 1910 he was inspector of explosives for the U.S. Navy in the Philippines, and later became chemist of the U. S. Naval Station there. In 1914 as chemist of the U. S. Dept. of Agriculture, he studied citrus fruit, becoming in 1917 director of the Scientific Department of the Societe International de Plantations et de Finance in the Far East, and from 1920 to 1923 was its managing agent. From 1923 up until a few months ago he was crude rubber production expert for Harvey S. Firestone.

Mr. Wierman in his address said that the production of the present supply of crude rubber is so closely held within the control of one or two nations as to be capable of being managed by legislative action to bring about changes in market prices. Touching on development of plantations in the Philippine Islands, Mr. Wierman maintained that the ruling factor there is not economic but political.

"I am not sure but that all the talk during the past few years of what Americans were going to do concerning rubber has been harmful rather than helpful, inasmuch as this talk has not to date been accompanied by much action.. The plan I would like to see tried is one in which the rubber industry as a whole would combine to devolop rubber production in many different countries. Even an annual assessment of 1/5 of a cent a pound on consumption would produce an amount sufficient for developing 40,000 acres, or say four units of 10,000 acres in different places.

Mr. Wierman expressed his confident belief that climatic conditions in the Gulf

Samuel Wierman

States would permit growing hevea, but that economic factors prevented such projects from becoming feasible. In a discussion which followed the address, J. W. Bicknell, of the United States Rubber Co. plantations, said that the development of high yielding strains should be regarded as new enterprises at the present time, because of the large investment in existing plantations.

Dr. Wiegand followed with an address on "Rubber Compounding as an Aid to Conservation," in which he pointed out that in the future the efforts of the rubber compounder toward reducing the necessary percentage of rubber must aim at holding up quality. Straight dilution of the rubber through reclaims or plastics inevitably results in decreased quality, the speaker said. Dilution by means of inactive powders likewise diminishes quality, but dilution of the rubber through a true colloidal reinforcing pigment, such as zinc oxide and above all, carbon black, does not reduce quality but, on the other hand, enhances it.

The speaker expressed his opinion that rubber compounding is as yet hopelessly empirical and stands sorely in need of rationalization by the general colloid chemist. "To the professional colloid chemist should come a blush of shame every time he looks at the rubber tires on his automobile," Dr. Wiegand said.

Following the meeting, Mr. Wierman left for California where he is now visiting relatives. He has made no announcement of his future plans.

CATALPO!

DESCRIBES NOVEL TEST FOR CABLE INSULATION

New Method of Testing Rubber Insulation on Electric Cable by Means of Ozone is Described by F. L. Haushalter of B. F. Goodrich Company

Many unique principles of physics are employed in tests of various sorts applied to materials, finished parts and assembled articles. A curious method of testing the rubber insulation on electric cable is by means of ozone. This new method is called the corona test, and is described by F. L. Haushalter of the B. F. Goodrich Company, in the October issue of the *Journal of the Society of Automotive Engineers.*

The effectiveness of the test depends upon the production of ozone by an electric current of high potential voltage, up to 15,000 volts being used, which breaks apart the atoms of oxygen in the air. The oxygen atoms then reunite in groups of three, forming ozone, which has a much more active oxidizing effect than ordinary oxygen. According to one theory, corona, which usually is detected by a purple glow and a hissing sound, is the result of a bombardment of gas ions, which multiply with increasing velocity as the potential of the electric current is increased, and the corona is started by the energy of the rapidly moving ions necessary to produce ionic saturation.

Soft vulcanized rubber insulation cracks quickly when subjected to the ozone if the rubber is stretched even a small amount, according to Mr. Haushalter, who states that crude unvulcanized rubber cracks in even a shorter time when stretched, but that when under compression neither vulcanized nor unvulcanized rubber cracks under this test. Protective coatings of cellulose or fabric mitigate and often prevent cracking of the stretched rubber. Curiously, however, the more the rubber is stretched beyond a certain degree the more it resists the action of the ozone, due, perhaps, to the greater hardness of the rubber under the higher tension.

A rubber insulated ignition cable used by a prominent automobile company resisted the corona test for one hour without any sign of cracking, while another sample of rubber-covered cable cracked noticeably in three minutes. Cable that will stand the test better than any other is perhaps one covered with vulcanized rubber that has a high permanent set or compression, says the author, as the surface tension, when the cable is bent, is a great deal less than occurs when cable protected by live rubber having a low permanent set is bent.

Miller Declares Dividend

A quarterly dividend of 50 cents a share on common stock without par value has been declared by the Miller Rubber Company. The dividend is payable Oct. 25 to stockholders of record Oct. 5.

FLUXRITE

FLUID — SOLID

Ager **Softener**

and

Mold Lubricant

Combined in one

A MONEY SAVER

DAMASCUS

DAMASCUS MANUFACTURING CORP.
W. 93rd. & W. & L.E.RR. Cleveland, Ohio

H. M. Royal, Inc. — N. J. District — Trenton, N. J.

DIPHENYL-GUANIDINE

Many manufacturers who are using reclaimed stocks find that Diphenylguanidine is THE accelerator. The merits of this accelerator are outstanding, including dependable performance and notable economy.

DOVAN CHEMICAL CORPORATION
30 CHURCH STREET NEW YORK CITY

DOVAN

REPRESENTED BY

J. A. Kendall, Akron, Ohio and Chicago, Ill.; J. E. Odell, Boston, Mass.; American Oil & Supply Co., Trenton, N. J.; C. A. McLarty, Toronto and Montreal; Martin, Hoyt and Milne, San Francisco and Los Angeles; Buckleton & Co., Ltd., 13 Rumford St., Liverpool, England.

Ample stocks are always carried at these points.

The CARTER BELL MFG CO

CARTER BELL STANDARD SINCE 1903 RUBBER SUBSTITUTES

150 Nassau Street New York

WHITING

Domestic

No. 313

Lowest priced Whiting filler.
300 mesh

Used where extreme whiteness is not essential.

Ask for a sample.

WM. S. GRAY & CO.
342 Madison Ave.
New York

THE HARSHAW FULLER & GOODWIN CO.

545 Hanna Bldg.—Cleveland, Ohio

CHEMICALS - COLORS - PIGMENTS

For

RUBBER MANUFACTURERS

ANTIMONY SULPHURET	LEAD OLEATE
CHROMIUM OXIDE	RED LEAD
GLYCERINE	LITHARGE

PARA CLAY — Dry Ground
WHITE FLOSS CLAY — Water Ground
DIAMOND MICA — Water Ground
HEXAMETHYLENETETRAMINE

WAREHOUSES

Cleveland - New York - Philadelphia
Chicago - Elyria - Trenton

Record Demand for Rubber Chemicals

Leading Firms Declare that Sales of Compounding Ingredients to Rubber Factories are Unprecedented for this Season of Year

NEW YORK, Oct. 18, 1926—Beginning with August, sales of chemicals and compounding ingredients to rubber manufacturers have been growing month by month. September was a record month with most factors, but it is expected that the totals when compiled for October will show that even a larger business was done this month. One large firm specializing in rubber chemicals has stated that September was the best month in its history. It is thought probable that demand from rubber factories will continue at the present rate until the middle of November after which time a curtailment may be expected since rubber manufacturers look for lower prices in the first quarter of 1927 and will not lay in heavy stocks of chemicals. Chemicals firms are highly satisfied with the current healthy demand which is unprecedented for this season.

ACCELERATORS

Organic

A-7	lb.	.70 @	—
A-40	lb.	.70 @	—
A-19	lb.	.75 @	—
A-11	lb.	.75 @	—
Aledhyde ammonia, crystals	lb.	.82 @	—
Aniline oil, drums	lb.	.17 @	.17½
"BB"	lb.	1.05 @	1.07
Captax	lb.	1.20 @	1.50
Crylene	lb.	.70 @	—
paste	lb.	.50 @	—
Di-Ortho-Tolylguanidine	lb.	1.08 @	—
Diphenylguanidine	lb.	.85 @	.88
Ethylidene aniline	lb.	.60 @	.65
Excellerex	lb.	.35 @	.40
Formaldehyde-Aniline	lb.	.40 @	.42
Grasselerator 102	lb.	.80 @	.82
Grasselerator 552	lb.	4.80 @	5.00
Grasselerator 808	lb.	1.25 @	1.50
Heptene	lb.	.55 @	—
Hexamethylene-tetramine	lb.	.80 @	.82½
Monex	lb.	3.25 @	—
Paraphenylenediamine	lb.	1.25 @	1.30
Piperidine-Piperidyldithio-Carbamate	lb.	4.80 @	5.00
R & H 50	lb.	— @	.65
Super-Sulphur No. 1	lb.	.50 @	—
Super-Sulphur No. 2	lb.	.18 @	.25
Tensilac, No. 41	lb.	.65 @	—
Thiocarbanilide, kegs	lb.	.28½ @	—
Trimene	lb.	.75 @	—
base	lb.	1.20 @	1.35
Triphenylguanidine	lb.	.70 @	.73
Tuads	lb.	3.25 @	3.50
Vulcone	lb.	.75 @	.79
Z. 88	lb.	.75 @	1.00
Zimate	lb.	4.00 @	—

Inorganic

Lead, sublimed blue	lb	.10 @	.10½
Lead, white	lb.	.10¾ @	—
Litharge, domestic	lb.	.12 @	—
Magnesia, calcined, light	lb.	.06½ @	—
heavy	lb.	.04½ @	—

COLORS

Blacks (See Compounding Materials)

Blues

Prussian	lb.	.32 @	.35
Ultramarine	lb.	.08 @	.35

Browns

Siena, Italian	lb.	.04 @	.08
Umber, Turkey	lb.	.04 @	.06

Greens

Chrome, light	lb.	.27 @	.31
medium	lb.	.29 @	.32
dark	lb.	.31 @	.33
Chromium Oxide, bbl.	lb.	.31 @	.38

Reds

Antimony crimson, 15/17	lb.	.27 @	—
sulphur free	lb.	.48 @	.50
vermillion 15/17	lb.	.37½ @	—
golden 15/17 F.S.	lb.	.16 @	.22
Indian English	lb.	.11 @	.13
Oximony	lb.	.13¼ @	—
Para toner	lb.	.80 @	.90
Red oxide, reduced	lb.	.11 @	—
pure	lb.	.12 @	.14
Toluidine toner	lb.	1.80 @	2.10
Venetian red	lb.	.01½ @	.05
Vermillion, quicksilver, English	lb.	1.45 @	1.50

Whites

Albalith	lb.	.05⅞ @	.06⅛
Lithopone, Akrolith	lb.	.05⅞ @	.06
Lithopone, Azolith	lb.	.05⅞ @	.06⅛
Zinc Oxide—American Process XX red	lb.	.07½ @	.07¾
Kadox, black label, kegs	lb.	.10⅞ @	.11⅛
blue " " "		.09⅞ @	.10⅛
red " " "		.08⅞ @	.09⅛
American Azo: ZZZ (lead free)	lb.	.07¼ @	.07¾
ZZ (under 5% leaded)	lb.	.06⅞ @	.07⅜
Zinc Oxide— French Process White seal	lb.	.12⅜ @	—
Green seal	lb.	.11⅛ @	—
Red seal	lb.	.10⅛ @	—

Yellows

Chrome	lb.	.17 @	.18
Ocher, French medium	lb.	.02¾ @	.03
domestic	lb.	.01¾ @	.02½

COMPOUNDING MATERIALS

Aluminum Flake (f.o.b. plant)	ton	21.85 @	24.50
hydrate light	lb.	.16 @	.17
Ammonia carbonate	lb.	.13½ @	.16½
Are-O-Sel	ton	8.00 @	11.00
Asbestine	ton	16.00 @	18.50
Barium carbonate	lb.	.03½ @	—
Barium Dust	lb.	.05 @	.06
Barytes southern off-color, ton		12.00 @	18.00
Western prime white	ton	23.00 @	—
imported	ton	27.00 @	36.00
Basofor	lb.	.04½ @	—
Blacks Arrow "Aerfloted"	lb.	.09 @	.13
Bone Black	lb.	.05½ @	.11
Carbon, compressed	lb.	.08½ @	.12½
" uncompressed	lb.	.08 @	.12
Drop Black	lb.	.07½ @	.14
Lamp "	lb.	.12 @	.40
Micronex	lb.	.09 @	.13
Thermatomic carbon	lb.	.05 @	—
Blanc fixe cry f.o.b. works	lb.	.04 @	.04½
Carrara filler	lb.	.01¾ @	.02
Catalpo (fact.)	lb.	.02 @	—
Chalk	lb.	.02½ @	.04½
Clay, China, domestic	ton	15.00 @	25.00
Aerfloted Suprex	ton	11.00 @	20.00
Blue Ridge, Dark	ton	9.00 @	—
" " Light	ton	12.00 @	—
Dixie	ton	20.00 @	35.00
Langford	ton	12.00 @	22.00
Mineral Flour, c. l. fob mine	ton	20.00 @	23.00
Glues, extra white	lb.	.19½ @	.29
medium white	lb.	.18 @	.24
common bone	lb.	.12 @	.14
Graphite flake, bbls.	lb.	.06½ @	.10
Magnesia, carbonate	lb.	.08 @	.08¾
Mica, powdered	ton	65.00 @	80.00
Rotten Stone (powdered)	lb.	.02½ @	.04½
Soapstone, powdered	ton	15.00 @	22.00
Starch, powdered	cwt.	3.30 @	3.70
Talc, domestic	ton	16.00 @	18.00
Terra Alba	cwt.	1.15 @	1.75
Tripoli, white	lb.	.02 @	.02¼
Whiting, commercial	cwt.	.85 @	1.00
English cliffstone	cwt.	1.50 @	—
Quaker	ton	13.00 @	15.00
Superfine	ton	10.00 @	12.00
Sussex	ton	8.00 @	10.00
Wood pulp XXX	ton	35.00 @	—
" " X	ton	25.00 @	—

MINERAL RUBBER

Genasco (factory)	ton	50.00 @	52.00
Granulated M.R.	ton	33.00 @	38.00
Hydrocarbon, Hard	ton	29.00 @	35.00
Hydrocarbon, Soft	ton	29.00 @	—
320/340 M.P. hydrocarbon (c. l. factory)	ton	47.00 @	52.00
300/310 M.P. hydro-carbon (c. l. factory)	ton	42.00 @	47.00
Paradura	ton	70.00 @	72.50
Robertson, MR, solid	ton	35.00 @	75.00
M.R. (gran)	ton	42.00 @	80.00

SOFTENERS

Acids

Muriatic, 20%	cwt.	.95 @	1.05
Nitric, 36 degrees	cwt.	5.00 @	5.25
Sulphuric, 60 degrees	ton	10.50 @	11.50
66 degrees	ton	15..00 @	16.00
Tartaric, crystals	lb.	.29½ @	—

Alkalies

Caustic soda, 76%	cwt.	3.60 @	—
Soda ash, 58% C.L.	cwt.	1.43 @	1.45⅛

Oils

Castor, No. 3 bbls.	lb.	.11½ @	—
Corn, crude, bbls.	lb.	.11 @	—
refined	lb.	.12 @	—
Cottonseed, crude		.08 @	—
Cycline	gal.	.26 @	.34
Fluxrite	lb.	.05 @	.06
Glycerine, C.P. drums	lb.	.30 @	.32
Linseed, Raw C.L.bbl.	lb.	.09 4-5 @	.10
Liquid Rubber	lb.	.12 @	—
Moldrite	lb.	.05 @	.06
Palm Lagos	lb.	.08⅝	.08¾
Niger	lb.	.08¼ @	.08⅜
Peanut, domestic, crude	lb.	.13 @	—
Petrolatum, white	lb.	.11⅛ @	.11⅜
amber	lb.	.03⅞ @	.04
dark amber	lb.	.03⅝ @	.03¾
Pine, steam distilled	lb.	.70 @	.72
Rapeseed, refined	gal.	.84 @	.90
blown	gal.	1.00 @	—
Rosin, first rectified	gal.	.80 @	—
second rectified	gal.	.85 @	—
Soya Bean, crude		.13¼ @	.13½
Synthecite	lb.	.06 @	—
Tar, commercial	gal.	.30 @	.32

Resins and Pitches

Pitch, Burgundy	lb.	.06½ @	.07½
coal tar	gal.	.05½ @	.06
pine	bbl.	7.50 @	8.50
Rosin, grade K	bbl.	11.25 @	—
Tar Retort	bbl.	16.00 @	17.00
kiln burned	bbl.	15.00 @	16.00
Tackol	lb.	.09 @	.15

Solvents

Acetone, pure	lb.	.14½ @	—
Alcohol denatured, No. 1 bbls.	gal.	.34 @	.47
Benzol, 90%	gal.	.30 @	—
pure		.30 @	—
Carbon bisulphide	lb.	.05½ @	.06¼
tetrachloride	lb	.07 @	—
Motor gasoline, steel bbls.	gal.	.21 @	—
Naptha, V. M. & P.	gal.	.20 @	.21
Turpentine, spirits	gal.	.86 @	.87
wood	gal.	.80 @	.84

Waxes

Beeswax	lb.	.60 @	.62
Carnauba, No. 1	lb.	.50 @	.51
Ceresin, white	lb.	.09 @	.10
Montan, crude	lb.	.06 @	.06⅛
Ozokerite, black	lb.	.24 @	.25
green	lb.	.26 @	.30
ParaffineWhiteA.M.P.	lb.	.05⅛ @	.05¼
Yellow A.M.P.	lb.	.05¼ @	.05⅜
Sweet Wax	bbl.	.10 @	—

ANTI-OXIDANTS

Age-Rite	lb.	.85 @	.90
Antox	lb.	.88 @	—
VGB	lb.	.66 @	—

SUBSTITUTES

Black	lb.	.08½ @	.14
White	lb.	.10 @	.17
Brown	lb.	.10 @	.15

VULCANIZING INGREDIENTS

Ethyl Chloride, Cyl.	lb.	.55 @	—
" " Drums	lb.	.45 @	—
Sulphur Chloride (drums)	lb.	.04 @	—
Sulphur flour Superfine, bags	cwt.	2.20 @	2.75
" bbls.	cwt.	2.35 @	3.10
100% pure, refined, bags	cwt.	2.60 @	3.15
bbls.	cwt.	2.85 @	3.40

Cotton and Tire Fabric News

ESTIMATE PUTS CROP AT 16,627,000 BALES

Largest Crop Ever Grown Forecast by Department of Agriculture on Basis of 61.3 per cent of Normal; Causes Alarm in the South.

The Crop Reporting Board of the Department of Agriculture on Oct. 8 forecast a cotton crop of 16,627,000 bales of 500 lbs. gross weight on a basis of 61.3 per cent of normal as of Oct. 1. The forecast was an increase of 817,000 bales over the Sept. 16 report. Ginnings to Oct. 1 totaled 5,639,284 bales the Census Bureau reported. The report indicates the largest crop ever grown, as the best previous record was in 1914 when 16,135,930 bales were harvested.

Panic conditions in the South resulting from the forecast are thought to be but temporary by Secretary of Agriculture Jardine who pointed out that the basic economic conditions of the country are sound and said that cotton producers must soon realize the intrinsic value of the crop has not changed in a few weeks.

"The people of the world need all the cotton we can produce," Secretary Jardine assured Edward A. O'Neil president of the Alabama Farm Bureau Federation, in a letter made public coincident with the issuance of the crop report. "We are in a position to supply their needs in an orderly manner. Cotton is not a perishable commodity. We have the necessary facilities for storing the crop for months, or if need be for years, and ample credit to carry it. Cotton in storage is probably the soundest basis for credit we know."

After pointing out that additional credit may be drawn upon by forming local credit associations and that farmers in the South can adjust their acreage intelligently if they retain a controlling interest in the crop until it passes into consumption, Secretary Jardine wrote that he did not share the view expressed by some that a large crop or a large carryover from one season to another is a misfortune.

"It is to the best interest of both the producer and the consumer to avoid wide fluctuations in cotton prices. The best way to avoid such fluctuations is to be in position to carry continuously an ample reserve, sufficiently large to absorb any surplus from one or more good seasons and to supplement the shortage of several bad seasons. We are now in position to begin the creation of such a reserve. We should accept the opportunity and make the most of it."

Both Senator Joseph P. Robinson of Arkansas and Representative Eugene Black of Texas favor the repeal of legislation directing the publication of the crop reports.

However, there is no assurance that the large crop in prospect will be harvested, as there still remain approximately 11,000,000 bales of cotton unpicked in the fields and yet to be ginned on the basis of the report to Oct. 1.

MEMPHIS CONFERENCE HAS RELIEF PROGRAM

A program designed to afford relief to cotton planters from the present market depression caused by the huge crop was discussed at recent sessions of the South-wide Cotton Conference. The retirement of 4,000,000 bales and the establishment by co-operatives of long-time pools of cotton to effect the withdrawal of the crop surplus were recommended in resolutions adopted by the Conference. The resolutions were drawn up by a committee named from every cotton growing state.

Cotton Committee

On Oct. 9 President Coolidge appointed the following men on a committee to cooperate with those engaged in the production, marketing and use of cotton: Eugene Meyer, managing director of the War Finance Corporation; Secretary Mellon of the Treasury; Secretary of Agriculture Jardine; and Secretary of Commerce Hoover.

CONSUMPTION OF TIRE FABRIC ABOVE NORMAL

Although Consumption of Tire Fabrics has Dropped in Last Few Weeks from August Levels, it is Still High for this Season of Year.

Tire fabric mills report that although consumption of yarn and fabric in the rubber industry has fallen off from the record levels of August, it nevertheless continues at a relatively high rate for this season at which time there is usually a decrease in manufacturing operations. A good demand for tire fabric is expected to continue for the remainder of the year principally because tire manufacturers have not been carrying large stocks.

Most of the rubber companies not being burdened with excessive inventories purchased at the higher prices prevailing earlier in the year, are consequently in a position to take advantage of current lower prices for fabric and cotton. Although the price of tire fabric has never been a factor of sufficient importance in the past to affect tire prices, fabric men believe it will be favorable to the rubber industry in the long run. It is believed that cotton and fabric prices are at rock bottom levels, and although these low prices have not caused a rush of buying, rubber manufacturers are said to be more confident in entering the market for future commitments.

Little square woven fabric is being sold by textile mills for use in tires, as cord fabric is gradually coming into universal favor, and each season sees fewer fabric tires manufactured.

NEW ENGLAND SOUTHERN MILLS

MANUFACTURERS OF TIRE FABRICS

This group of Mills is thoroughly equipped to produce coarse builders, breakers and chafers in all grades of cotton, in yarn numbers ranging from 4's to 30's in order to meet the demand for coarser yarns and lower cost fabrics.

LAWRENCE & CO., SELLING AGENTS

89 Franklin St., Boston **24 Thomas St., New York**

New Cotton Crop Forecast Brings Crisis

Weak Market Collapses when Government Crop Forecast of 16,627,000 *Bales Causes Heavy Selling from all Sides*

A cotton market already weak due to lack of both speculative and investment buying as well as little trade demand collapsed on the 8th when a Government crop estimate of 16,627,000 bales caused heavy selling on all sides. The decline amounted approximately to $4.00 a bale. The estimate was 817,000 bales larger than the last one and was some 627,000 bales higher than the average of private reports. It was regarded by most as indicating probably a yield of 17,000,000 bales, if not more than that, as the weather had been good since the beginning of the month.

Mill buying started just after the break and continued each day. It was spread over almost the entire list of months. The buying by trade interests was also on a scale which aroused interest and only hedge selling. The efforts being made in the South to finance the surplus and the disposition on the part of many to hold off the market as far as feasible were productive of a good sentiment. It was said at the time, however, that the effect of these operations would be more evident in a check to declining prices than the basis for a substantial advance.

Heavy rains in the Southwest and elsewhere in the cotton belt, coupled with increasing interest in the movement to hold cotton back, helped the market not only to hold its ground in succeeding days but to advance. The spot market continued to rise with a keener demand at such centers as Memphis and Charlotte. It was reported that more deliberate marketing was being done in the South. And the report of the Census Bureau on the 13th exerted a good influence.

Many factors, including a weaker technical position, the reappearance of hedge selling and the decline in the stock market, together with an "into sight" weekly crop movement of 930,000 bales, checked the advance toward the end of last week. A sharp break of from $2 to $2.50 a bale, caused by weak Liverpool cables, generally good weather, aside from that in Texas, and the persistent fear of a large crop occurred last Saturday. Bull speculation had entirely deserted the market. After declining $1.50 a bale during early trading today under the weight of accumulated selling orders over the week end, quotations developed a steady undertone.

Current COTTON and FABRIC *Quotations*

COTTON CLOSING PRICES

	Open	High	Low	Close Oct. 18	Close Oct. 2
December	12.60	12.80	12.58	12.79	13.29
January	12.68	12.88	12.67	12.87	13.38
March	13.00	13.11	12.92	13.10	13.58
May	13.22	13.32	13.15	13.31	13.80
July	13.50	13.50	13.35	13.50	——

TIRE FABRICS

CORD

Peeler, carded, 23/5/3	lb.	.38	@	.41
Peeler, carded, 23/4/3	lb.	.37	@	.38
Peeler, carded, 15/3/3	lb.	.40	@	.41
Peeler, carded, 13/3/3	lb.	.37	@	.38
Egyptian, carded, 23/5/3	lb.	.48	@	—
Egyptian, combed 23/5/3	lb.	.55	@	.56

SQUARE WOVEN

Carded American, 17¼ oz. 23-11 ply	lb.	.38	@	.41
Carded American, 17½ oz. 10-5 ply	lb.	.38	@	.40

LENO BREAKER

Carded American, 8 oz.	lb.	.42	@	.45
Carded American, 10 oz.	lb.	.42	@	.45

CHAFERS

Carded American, 8¼ oz.	lb.	.42	@	—
Carded American, 9½ oz.	lb.	.42	@	.43
Carded American, 12 oz.	lb.	.42	@	.43
Carded American, 14 oz.	lb.	.40	@	.41

SHEETINGS

40-inch 2.50-yard	yd.	.12⅛	@	.12½
40-inch 2.85-yard	yd.	.10¾	@	.11
40-inch 3.15-yard	yd.	.11⅜	@	.12
40-inch 3.60-yard	yd.	.09¼	@	.09½
40-inch 3.75-yard	yd.	.08¼	@	.08⅝
40-inch 4.25-yard	yd.	.08	@	.08¼

DUCKS

Belting and Hose	lb.	.30	@	.31
Enameling	lb.	.32	@	.35
Shoe Ducks	lb.	.35	@	.36
Single filling	lb.	.13½	@	.15
Double filling	lb.	.16	@	.16½

Tire Fabrics

Two weeks ago demand for tire fabrics was colorless, with inquiries mostly confined to small lots for spot and nearby deliveries. A number of the smaller companies figured in these inquiries. During the past few days, however, a good part of the business which had been hanging fire was placed. Contracts were reported to have totaled 4,000,000 pounds on a basis of 40 cents for carded peeler cords, 25c 5-3 ply, Dec./June deliveries. During the past few days the price situation showed some irregularity, for higher prices are asked for deliveries this year than on late deliveries. Mills seemed to have been willing sellers at concessions under quoted levels. A good deal of business for deliveries through the first six months of 1927 was reported to be pending. Some producers have sold up their entire 1926 production.

Sheetings

During the past fortnight demand for sheetings has shown some improvement. Bids at less than the mills would consider were made in some instances, but on good sized quantities concessions of ⅛ of a cent were obtained. Although October deliveries interested buyers to the greatest extent, there was inquiry for forward deliveries, and a few commitments covering delivery in the first half of 1927 were placed at sharp price concessions. Mills reported that they had little October goods available.

Ducks

Although quotations held up well at the beginning of the month, they later became more attractive to buyers. Recently quotations were held nominal and subject to change, depending on firm orders to buy. Mills have a good backing of orders on their books and claim to be in a fairly strong position. Business has been better in heavy constructions than in other grades. A trend toward lower quotations was reported in several quarters.

J. H. LANE & CO.

Tire Fabrics Cord Fabrics

Enameling Duck Drill Sheeting

Osnaburg and Special Constructions

250 W. 57 Street, NEW YORK 323 South Franklin St., CHICAGO

The Market Place

WHERE TO OBTAIN

Machinery, fabrics, chemicals, compounding ingredients, crude and reclaimed rubber, consulting chemical and engineering services. **1.**

ACCELERATORS—X L O and Diphenyl Guanidine.

Dovan Chemical Corp.

30 Church St. New York

ACCELERATORS — Two new accelerators: Vulcone and Di-ortho-tolylguanidine.

E. I. du Pont de Nemours & Co., Inc.

Dyestuffs Dept. Sales Div.

Wilmington, Del.

ACCELERATORS

Grasselerator 102
Grasselerator 552
Grasselerator 808

Grasselli Chemical Co.

Rubber Service Dept.

347 Madison Ave., New York

ACCELERATORS— Every lot is tested before shipment and a written guarantee of quality furnished.

Roessler & Hasslacher Chem. Co.

709 Sixth Ave. N. Y. City

ACCELERATORS—A19, A7, Thiocarbanilid.

The RUBBER SERVICE Laboratories Co.

611 Peoples Savings & Trust Bldg.

Akron Ohio

ANTIMONY Pentasulphide, golden and crimson, very fine, pure.

Rare Metal Products Co.

Belleville, N. J.

Direct Factory Representation

The
BLUE LIST
of the
Industry

Your Products Listed Here

reach buyers in rubber factories at a cost lower than is possible by any other method.

ARRANGE FOR YOUR LISTING TODAY!

ASBESTINE— Specially prepared for use in Rubber. Send for liberal working sample.

SOLE PRODUCERS

International Pulp Co.

41 Park Row, New York City

BEAD CABLES— National Flat Woven and Pratt Patent Bead Cables.

National Standard Co.

Niles, Mich.

BOLTON BIAS CUTTER

Cuts cord or flat woven fabrics with equal ease and precision. In use all over the world.

Spadone Machine Co., Inc.

15 Park Row New York

CALENDERS—Embossing, for artificial leather, oil cloth etc.

Textile-Finishing Machinery Co.

83 Exchange Place, Providence, R. I

CARBON BLACK—*Micronex* the world's standard gas black, universally known as the "King of Rubber Pigments."

Binney & Smith Co.

41 East 42nd St. New York City

CARBON BLACK

Godfrey L. Cabot, Inc.

Manufacturers for forty years.

940 Old South Bldg., Boston, Mass.
612 Metropolitan Bldg., Akron, O.

CARBON BLACK—*Aerfloted* Arrow Black for rubber compounding. Standard for grit-free uniformity.

J. M. Huber, Inc.

130 West 42nd St. New York

CARBON BLACK or any other compounding material used by rubber manufacturers can be marketed at low cost by listing it in *The Market Place.*

CATALPO — The universal and standard rubber pigment now being used in treads, solids, tubes, carcass frictions, etc.

Moore & Munger

33 Rector Street
New York City

The Most Economical Form of Advertising

The Market Place Section of THE RUBBER AGE contains the *only* alphabetically arranged listings of small 'ads' available in the rubber industry. Your advertisement in this section will not only be easy to find, but it will produce excellent results at very moderate costs. Let us send you details.

THE MARKET PLACE Section Continued on Second Page Following.

STATISTICAL SECTION

TIRES & TUBES
CRUDE RUBBER

AUTOMOBILES
GASOLINE

AS WILL be seen in the table on page 99, to which late statistics have just been added, rubber consumption in the United States in September was greater than had been expected, falling very little short of 33,000 long tons. The exact figure was 32,904. The rubber consumed in this country during the first nine months of the year is seen to amount to 281,851 long tons. This is at the rate of 31,317 tons per month. Last year the United States used 301,833 tons of rubber in the first nine months, an average of 33,537 tons per month. In other words, American rubber factories have reduced their monthly consumption this year by more than 2,000 tons. The early estimates of American consumption in 1926 ranged from 360,000 to 375,000 tons. None of them put the figure above the 386,000 tons which were used last year although British estimates ran as high as 410,000. The figures now available indicate that the American estimates were sound.

Average Spot Closing Prices--Ribbed Smoked Sheets

(New York Market)

Average Price per Pound for Years 1910-1920

Year	*Cents*	*Year*	*Cents*	*Years*	*Cents*
1910	206.60	1914	65.33	1918	60.15
1911	141.30	1915	65.85	1919	48.70
1912	121.60	1916	72.50	1920	36.30
1913	82.04	1917	72.23		

Average Monthly Price per Pound since 1921

Months	1921 *Cents*	1922 *Cents*	1923 *Cents*	1924 *Cents*	1925 *Cents*	1926 *Cents*
Jan.	19.18	18.82	32.73	25.86	36.71	79.50
Feb.	17.96	16.12	35.14	25.29	36.01	62.25
Mar.	17.05	14.53	34.21	22.83	41.00	59.00
Apr.	16.73	15.99	32.48	22.51	43.64	51.25
May	15.82	15.25	27.39	19.89	58.47	47.75
June	12.49	15.11	26.88	18.81	77.26	42.50
July	14.01	14.67	26.10	22.16	103.16	41.03
Aug.	14.04	13.93	28.84	26.17	82.99	38.50
Sept.	14.53	14.44	28.95	27.56	88.88	41.00
Oct.	16.02	19.78	26.93	31.13	98.01	
Nov.	18.06	23.88	27.14	34.33	104.80	
Dec.	20.47	27.42	26.60	37.88	98.51	
Average for Year	16.36	17.50	29.45	26.20	72.46	

London Closing Prices of Ribbed Smoked Sheet

(In pence per pound)

Fourth Restriction Year—Fourth Quarter

Day	*Aug.*	*Sept.*	*Oct.*	*Day*	*Aug.*	*Sept.*	*Oct.*
1	—	19¾	21	16	19½	19¾	21⅛
2	—	19½	21	17	19⅝	20	
3	18⅞	19¾	—	18	19⅝	20⅛	
4	18½	19¾	21⅛	19	20	—	
5	18⅞	—	21	20	19⅞	20⅛	
6	10½	19⅝	21	21	19⅞	20⅜	
7	19½	19¾	20⅞	22	—	20½	
8	—	19⅞	20¾	23	19⅞	21	
9	19	19¾	20¾	24	19¾	21⅛	
10	19¼	19⅝	—	25	19⅝	21⅛	
11	19	19¾	20⅞	26	19⅝	—	
12	19⅜	—	20⅞	27	19⅝	21⅛	
13	19½	19⅝	20⅞	28	19¾	21⅛	
14	19½	19¾	20⅞	29	—	21⅛	
15	—	19⅝	21	30	20	21	
				31	19⅞	—	

(The average price for the period for which daily prices are reported above is approximately 20.078 pence. The British Colonial Secretary has announced that only 80% of the standard production will be exportable from the restricted area during the next quarter if the price during the entire current quarter does not average at least 21 pence.)

Average Price in Previous Quarters

Quarter	1922-23	1923-24	1924-25	1925-26
Nov-Jan	14.285	14.175	17.9983	46.709
Feb-Apr	16.858	12.917	19.356	28.103
May-July	14.242	10.974	38.469	21.001
Aug-Oct	14.944	14.632	43.269	

U. S. Imports and Exports of Crude Rubber.

YEARS	Gross Imports: *Long Tons*	Gross Imports: *Total Declared Value*	Gross Imports: *Average Declared Value per pound Cents*	Re-exports: *Long Tons*	Re-exports: *Total Declared Value*	Re-exports: *Average Declared Value per pound Cents*	Net Imports *Long Tons*
1900	22,026	$28,577,789	57.92	1,718	$2,839,668	73.77	20,308
1901	24,617	28,120,218	51.00	1,663	2,425,727	65.11	22,954
1902	22,702	25,158,591	49.47	1,457	1,877,698	57.52	21,245
1903	24,886	35,152,642	63.06	1,646	2,598,416	70.47	23,240
1904	27,629	43,784,297	70.75	1,540	2,749,234	79.70	26,089
1905	28,637	48,517,906	75.63	1,616	3,149,989	87.00	27,021
1906	30,316	53,391,137	78.62	1,676	3,153,775	84.02	28,640
1907	30,649	49,813,361	72.56	1,832	3,509,902	85.55	28,817
1908	34,058	44,696,526	58.59	1,655	2,466,428	66.52	32,403
1909	41,950	79,264,817	84.35	2,161	4,233,921	87.46	39,789
1910	40,241	98,007,295	108.73	2,749	8,134,064	132.07	37,494
1911	36,987	74,410,550	89.81	2,523	4,977,174	88.07	34,464
1912	52,705	99,567,071	84.34	2,456	4,692,262	85.31	50,249
1913	51,732	76,820,739	66.29	1,881	3,396,429	80.62	49,851
1914	63,868	70,472,704	49.26	2,618	3,244,346	55.32	61,250
1915	98,876	111,031,144	50.13	2,082	2,357,350	50.54	96,794
1916	120,576	159,745,475	59.15	4,098	5,330,100	58.07	116,478
1917	181,089	233,220,904	57.49	4,000	5,305,289	59.21	117,089
1918	145,518	146,378,313	44.91	2,746	3,133,622	50.95	142,772
1919	239,259	215,820,113	40.27	2,282	2,205,629	43.15	236,977
1920	252,922	242,795,773	42.86	4,160	2,846,898	30.55	248,762
1921	185,394	73,772,677	17.76	5,716	2,414,924	18.86	179,678
1922	301,076	101,843,188	15.10	4,809	1,921,828	17.84	296,267
1923	309,144	185,060,304	26.72	8,772	5,672,319	28.87	300,372
1924	328,056	174,231,331	23.71	10,309	6,057,637	26.23	317,747
1925:							
Jan.	32,898	22,406,756	30.41	1,162	963,593	37.02	31,736
Feb.	24,696	18,532,115	33.50	979	779,406	35.53	23,717
Mar.	33,072	25,146,691	38.94	1,345	1,105,119	36.69	31,727
Apr.	32,506	24,874,562	34.16	1,130	1,009,305	39.86	31,376
May	36,932	30,311,754	36.64	1,203	1,323,445	49.12	35,729
June	31,569	26,855,883	37.98	1,198	1,577,106	58.75	30,371
July	32,455	33,701,723	46.36	1,278	2,132,681	74.52	31,177
Aug.	33,412	39,834,348	53.22	1,131	1,623,258	64.08	32,281
Sept.	26,367	36,686,013	62.11	1,154	1,820,360	70.41	25,213
Oct.	34,651	50,027,338	64.45	1,132	1,989,291	78.48	33,519
Nov.	37,755	56,271,963	66.54	1,605	2,898,930	80.65	36,150
Dec.	40,329	65,055,868	72.02	1,510	2,625,259	77.61	38,819
	396,642	429,705,014	48.36	14,827	19,847,753	59.76	381,815
1926:							
Jan.	42,404	72,528,151	76.36	2,084	3,747,505	80.28	40,320
Feb.	32,865	58,733,370	79.78	1,430	2,280,168	71.17	31,435
Mar.	42,152	70,589,581	74.76	1,836	2,735,234	66.51	40,316
Apr.	34,544	48,742,539	62.99	1,128	1,605,093	63.58	33,416
May	29,756	36,896,080	55.35	1,052	1,558,987	66.17	28,704
June	24,900	34,498,561	61.85	1,105	1,371,217	55.41	23,795
July	35,820	33,061,470	41.20	1,554	1,743,854	50.09	34,266
Aug.	27,400	24,670,752	40 21	1,318	1,339,563	45.38	26,082
Sept.							
Oct.							
Nov.							
Dec.							

The Market Place

3.

HEELS, soles and strips
We can make any special brand with your molds or with ours. Best quality at the lowest price. Consult us.
P. & B. Rubber Mfg. Co., Inc.
Laurel Hills, Long Island, N. Y.

MOLDS AND CORES—
Tire building equipment; general machine work.
The Akron Equipment Co.
Akron, Ohio

RECLAIMED RUBBER—
Uniformity, reliability, cleanliness.
Pequanoc Rubber Co.
Butler, N. J.

LINERS — PROCESSED
For
Various Rubber Stocks
The Cleveland Liner & Mfg. Co.
5508 Maurice Ave., Cleveland, O.

MOLDS & CORES—Tire building machines; tire finishing stands; tubing machines; hydraulic presses.
The Akron Standard Mold Co.
Akron, Ohio

RECLAIMED RUBBER
of Standardized Quality.
NO. 188 FOR TUBES
Philadelphia Rubber Works Co.
New York Akron Philadelphia

MACHINERY—
Heater Presses, Molds and Cores, Tubing Machines.
The Williams Foundry & Mach. Co.
"In Business Since 1888"
Akron, Ohio

MOLDS & CORES—for automobile tires; general machine work.
Kuhlke Machine Co.
Akron, Ohio

RECLAIMED RUBBER—
for all purposes.
Rubber Regenerating Co.
Naugatuck, Conn.

MANDRELS--CIRCULAR
and Economy Calender Shells
Prompt Service—Let us quote you.
The Clyde E. Lowe Co.
2976 E. 81st St., Cleveland, Ohio

"NU-GUM" RUBBER
Produced from No. 1 Floating Tubes. Absolutely pure — no oils —no compound added. *Specific Gravity*, .98.
E. L. Bullock & Sons, Inc.
99 John St. New York City

RECLAIMED RUBBER
A standardized grade for every requirement.
U. S. Rubber Reclaiming Co., Inc.
100 E. 42nd St., New York, N. Y.
"43 Years Serving the Industry Solely as Reclaimers"

MICA — Water Ground and Water Floated — 160 Mesh —Absolutely Free from Grit. Akron Stocks, also Factory Shipments.
The C. P. Hall Co.
116 Central Savings & Trust Bldg., Akron

PINE TAR — Retort "Sunny South", "Pentareo", "American". Brands for Tires, Tubes, Mechanicals,—Reclaim. *The Best Softener*
E. W. Colledge
P. O. Box 356 Jacksonville, Fla.
Agents in New York, Chicago, Cleveland.

RECLAIMED RUBBER
The Xylos Rubber Co.
Akron, Ohio
CAPACITY 250,000 POUNDS DAILY

MICA—160 mesh—water ground —water floated—free from foreign matter.
Stocks carried at Trenton, N. J.— Cleveland, O.—Chicago, Ill.
The Harshaw Fuller & Goodwin Company
Hanna Building. Cleveland, Ohio

POWER EQUIPMENT
Boilers — Compressors — Pumps
Generators — Tanks — Heaters
Rubber Machinery
F. William Stocker
Hoboken, New Jersey.

RED OXIDE—A special grinding, guaranteed uniform in color and quality.
Joseph A. McNulty
114 Liberty St. New York City

MOLDS
FOR TIRES, MECHANICAL GOODS & DRUGGIST SUNDRIES.
The Akron Rubber Mold & Machine Co.
AKRON, OHIO.

RECLAIMED RUBBER
We specialize in fine Grey, Black and Red Reclaimed Rubber.
Send us Your Inquiries
The Defiance Rubber Co.
Defiance, Ohio

RUBBER—Crude and scrap, all grades.
H. Muehlstein & Co.
Liggett Bldg. New York
Akron, Chicago, Boston, Hoboken

THE MARKET PLACE Section Continued on Second Page Following.

United States Tire and Tube Statistics[1]

Production, Sales, and Inventories[2]

AUTOMOBILE CASINGS

	Production During Month					Sales During Month					Inventory at End of Month				
	1922	1923	1924	1925	1926	1922	1923	1924	1925	1926	1922	1923	1924	1925	1926
Jan.	2,740	4,170	4,294	4,740	4,721	2,194	4,114	3,785	4,013	2,974	5,566	6,261	6,411	7,949	9,947
Feb.	2,779	4,291	4,372	4,908	4,865	2,144	3,568	3,849	3,924	3,436	6,255	6,966	7,020	8,928	11,164
Mar.	3,528	5,154	4,570	5,276	5,456	2,847	4,570	3,988	4,657	4,561	6,911	7,561	7,684	9,510	12,004
Apr.	3,202	4,719	4,410	5,341	5,346	2,853	4,106	4,018	5,498	4,980	7,286	8,118	8,219	9,088	12,461
May	3,629	4,880	4,051	5,467	5,023	3,608	3,793	3,693	5,954	5,211	7,364	9,209	8,442	8,611	12,343
June	3,785	3,943	3,506	5,418	5,422	4,281	3,448	3,671	6,737	5,724	6,723	9,387	8,207	7,243	11,968
July	3,302	2,657	3,403	5,587	4,950	3,678	3,463	4,748	6,298	6,337	6,445	8,628	6,851	6,421	10,592
Aug.	3,874	3,141	4,313	5,607	5,872	4,153	3,803	5,010	4,760	6,944	6,173	8,078	5,969	7,261	9,732
Sept.	3,340	2,706	4,708	5,007		3,407	3,563	4,539	4,569		6,149	7,197	6,033	7,681	
Oct.	3,566	3,148	5,169	4,505		3,534	3,821	4,196	5,580		6,244	6,502	7,118	6,670	
Nov.	3,644	3,200	4,253	4,229		3,248	3,408	4,480	3,671		6,620	6,252	6,943	6,955	
Dec.	3,543	3,250	4,584	4,760		4,040	3,547	4,143	3,601		6,132	5,772	7,427	8,142	
	40,932	45,259	51,633	60,845		39,987	45,204	50,120	59,262						

AUTOMOBILE INNER TUBES

	Production During Month					Sales During Month					Inventory at End of Month				
	1922	1923	1924	1925	1926	1922	1923	1924	1925	1926	1922	1923	1924	1925	1926
Jan.	3,125	5,269	5,184	6,343	6,809	2,552	5,091	4,723	5,576	3,723	6,996	7,784	8,960	11,570	14,361
Feb.	3,462	5,386	5,424	6,339	6,825	2,310	4,085	4,530	4,971	3,736	8,189	9,029	9,786	13,023	17,090
Mar.	4,023	6,501	5,625	7,000	7,030	2,848	5,214	4,667	5,711	4,987	9,321	10,321	10,877	14,236	19,131
Apr.	3,534	5,679	5,380	6,851	6,554	3,162	4,825	4,782	6,704	5,051	9,640	11,192	11,503	13,618	20,674
May	3,961	5,757	4,992	6,846	6,149	3,995	4,651	4,865	8,040	6,304	9,586	12,390	11,682	12,501	21,141
June	4,174	4,787	4,658	6,942	6,171	5,391	4,882	5,286	9,032	6,898	8,249	11,899	10,888	10,409	20,243
July	4,091	3,500	5,143	7,544	5,729	4,905	5,374	7,190	9,140	8,569	7,568	9,862	8,845	8,635	17,267
Aug.	5,078	4,771	6,688	7,618	7,424	5,733	5,800	7,493	6,923	9,579	6,943	9,267	7,678	9,271	15,462
Sept.	4,669	4,339	7,342	7,254		4,797	4,966	6,908	6,665		6,886	8,610	8,052	9,950	
Oct.	5,050	5,140	7,861	6,612		4,618	4,848	5,700	7,845		7,317	9,198	9,803	8,726	
Nov.	5,135	4,602	6,136	6,266		4,165	4,604	6,332	5,406		8,280	8,925	10,224	9,491	
Dec.	4,548	4,385	6,273	6,999		5,197	4,732	5,540	4,991		7,643	8,425	11,052	11,313	
	50,850	60,116	70,706	82,614		49,673	59,072	68,016	81,004						

(1) *Statistics of The Rubber Association of America, raised to 100%.* (2) *All figures expressed in thousands.*

Stock of Crude Rubber in United States and London

(All Quantities in Long Tons)

UNITED STATES

At End of	ON HAND			AFLOAT			ON HAND AND AFLOAT		
	1924	1925	1926	1924	1925	1926	1924	1925	1926
Jan.	——	60,870	55,198	——	36,759	46,296	——	97,629	100,434
Feb.	——	54,109	58,035	——	41,475	46,935	——	95,584	104,970
Mar.	——	52,494	61,822	——	40,577	43,567	——	93,071	105,389
Apr.	——	50,143	55,261	——	53,465	41,905	——	103,608	97,166
May	——	52,064	64,360	——	46,846	40,303	——	98,910	104,663
June	——	50,997	60,460	——	51,202	40,907	——	102,199	101,367
July	——	46,245	64,900	——	46,003	38,062	——	92,248	102,962
Aug.	——	42,354	60,870	——	41,254	37,360	——	83,608	98,230
Sept.	——	36,367	62,078	——	55,151	42,464	——	91,518	105,542
Oct.	55,378	34,085		46,359	51,098		101,737	85,183	
Nov.	59,017	34,885		35,685	42,692		94,702	86,577	
Dec.	56,080	51,215		46,216	48,208		102,296	99,423	

(Rubber Association of America figures raised to 100%.)

LONDON

(In Wharves and Warehouses—Figures Include Latex)

At End of:	1920	1921	1922	1923	1924	1925	1926
January	19,300	56,573	67,252	73,498	57,460	27,172	9,994
February	18,329	59,439	67,623	70,483	56,732	23,425	10,004
March	18,969	63,913	66,670	63,438	55,647	18,104	13,750
April	20,072	68,759	68,637	58,770	54,559	12,949	18,951
May	20,921	70,403	70,146	54,439	51,615	5,895	20,896
June	22,517	69,408	71,597	51,050	51,115	5,318	23,894
July	25,346	71,065	71,515	49,937	52,073	4,258	27,727
August	30,674	73,211	72,112	48,427	49,700	4,619	30,764
September	35,504	72,175	70,977	54,523	44,011	5,453	
October	41,743	69,229	68,536	58,891	37,523	5,086	
November	45,550	70,786	68,548	60,074	33,593	3,869	
December	50,652	69,792	72,299	60,246	29,488	5,697	

United States Consumption of Gasoline

(Gallons)

MONTHS:	1918	1919	1920	1921	1922	1923	1924	1925	1926
January	144,579,291	169,240,627	236,073,140	294,750,791	282,717,148	456,967,163	500,420,689	595,413,000	720,358,000
February	147,204,377	185,900,192	248,395,214	225,195,372	262,925,732	380,093,070	402,703,876	543,640,000	650,718,000
March	219,333,317	201,004,317	256,020,539	346,164,546	380,406,778	446,460,208	467,181,088	625,053,000	779,571,000
April	265,151,411	243,440,615	297,000,463	333,290,921	385,230,994	485,716,788	607,175,026	798,305,000	831,410,000
May	313,824,603	327,610,273	378,912,692	354,263,486	499,724,405	582,535,781	672,495,321	841,787,000	989,857,000
June	306,677,723	305,960,438	427,747,291	442,924,973	506,959,446	633,504,590	682,409,140	868,350,000	969,051,000
July	353,589,555	296,242,260	434,879,617	457,758,078	566,099,329	674,019,467	789,666,590	963,071,000	1,014,804,000
August	339,435,744	376,484,274	479,741,391	505,035,827	583,687,932	692,154,000	828,057,347	931,901,000	1,103,844,000
September	284,685,213	367,633,742	450,888,670	438,083,634	507,924,207	655,797,616	718,068,623	848,867,000	
October	299,642,892	338,429,709	384,802,246	454,995,551	490,393,454	621,172,668	751,499,199	831,774,000	
November	245,278,844	284,620,309	366,567,344	350,548,481	471,616,103	538,308,809	698,359,199	757,744,000	
December	209,863,377	238,245,230	289,673,556	313,015,596	434,399,514	518,305,120	657,967,000	759,699,000	
TOTAL	3,129,266,347	3,434,812,486	4,250,696,163	4,516,027,256	5,372,085,042	6,685,035,280	7,770,238,000	9,365,604,000	

ALL THE LEADERS

Are represented in this section. Purchasing agents can rely on the concerns listed as thoroughly reliable in every way.

The Market Place 2.

Great Oaks From Little Acorns Grow

—and likewise a small beginning in the matter of advertising space is the first step to a bigger business!

Start Now by using listings in

THE MARKET PLACE

Rates are low— and results are sure.

CRUDE RUBBER — All Grades. Washed - Dried - Milled.
Send us Your Inquiries.
Gibraltar Rubber Corp.
West New York, N. J.

ENGINEERS
Machinists, Iron and Steel Founders
Standard and Special
Rubber Working Machinery
The Adamson Machine Co.
Akron, Ohio

CRUDE RUBBER BROKERS
Henderson Brothers Co., Inc.
60 Beaver St., New York City
Members Rubber Exchange of N. Y.

FABRICS— Spots and Contracts: Tire Fabrics, Enameling ducks, Tube Wrapping Tapes.
H. Frank Jones
395 Broadway New York City

CRUDE RUBBER
Importers and Dealers
Members Rubber Exchange of N. Y. and Rubber Exchange Clearing House
Henderson, Helm & Co., Inc.
44 Beaver St., New York
Weekly Market Review on Request

FABRICS—Tire, cords, enameling ducks, drills, sheetings, osnaburgs.
J. H. Lane & Co.
250 West 57th St. New York City

CHEMICALS — Accelerators
Trimene Base, Heptene, Monex, Crylene, Lithex, Aniline Oil.
Clay—Mineral Flour, Seminole (Georgia).
Antioxidant—VGB, a proven product.
Labels—all-rubber two color brands.
Naugatuck Chemical Co.
1790 Broadway, New York.

CRUDE RUBBER
We Solicit Your Inquiries
H. Muehlstein & Co., Inc.
41 East 42nd. St., N. Y. City
Offices in Akron, Chicago, Boston.

FABRICS—Tire fabrics—coarse builders, chafers, breakers in all grades.
New England Southern Mills
LAWRENCE & CO.
24 Thomas St. New York
Boston, Philadelphia, Chicago, St. Louis, San Francisco

CHEMICALS and compounding ingredients; Clay, Whiting, Accelerators, Mineral Rubber.
R. T. Vanderbilt Co.
50 East 42nd St. New York City

CRUDE RUBBER
Importers
Members Rubber Exchange of N. Y., Inc. and Rubber Exchange Clearing House, Inc.
Charles T. Wilson Co., Inc.
82 Beaver St., New York
AKRON OFFICE: 507 Second Nat'l. B'ldg.

FACTICE—Prevents blooming, makes colors fast and a smoother batch.
Stamford Rubber Supply Co.
Stamford, Conn.

CHEMICALS and COLORS
for all classes of mixing and cure. Complete rubber laboratory service for our customers.
Wishnick-Tumpeer, Inc.
New York Chicago Cleveland Boston

DIPHENYLGUANIDINE
Aero Brand, product of the highest purity from dependable source of supply.
American Cyanamid Co.
511 Fifth Ave. New York City.

FLUXITE — Liquid and Solid — A rubber softener and aging compound of great efficiency.
Damascus Mnfg. Corp.
E. 93rd. St. & Cassius Ave.,
CLEVELAND, OHIO

CONSULT BANNER
Before You Buy
TIRE BUILDING MACHINES
The Banner Machine Co.
Columbiana, Ohio
Paul A. Frank, Akron, Ohio, Agent.

DRY KILN—for drying crude rubber and chemicals—Hunter Process.
Carrier Engineering Corporation
750 Frelinghuysen Ave. Newark N. J.

GUAYULE—"Duro" Brand washed and dried ready for compounding.
Continental Rubber Co.
120 Broadway New York

THE MARKET PLACE Section Continued on Second Page Following.

Exports of Crude Rubber from Principal Producing Countries

(Figures in Long Tons)

	British Malaya[1]								Dutch East Indies[2]			French[3]		
	Gross Exports	*Imports*	*Net Exports*	*Ceylon*[2]	*India & Burma*[3]	*Br. North Borneo*[4]	*Sarawak*[4]	*Siam*[4]	*Java & Madura*	*Sumatra E. Coast*	*Other D.E.I.*	*Indo-China*	*Amazon Valley*[5]	*Total*[7]
1923	252,016	70,432	181,584	37,112	6,416	5,433	1,744	1,718	32,938	44,002	57,822	5,606	19,859	394,263
1924	259,760	107,419	152,341	37,351	7,697	6,485	1,892	2,962	42,446	52,499	80,347	6,688	23,164	413,872
1925	316,825	158,022	158,803	45,684	10,082	8,460	2,308	5,378	46,643	62,678	119,271		25,307	
1925:														
Jan.	19,183	10,132	9,051	3,065	1,090	605	180	404	3,053	5,097	5,858	701	1,712	30,816
Feb.	21,622	10,071	11,551	2,207	1,121	469	148	283	3,490	5,139	8,569	586	2,977	36,540
Mar.	26,836	13,399	13,437	4,201	984	756	209	437	4,583	5,499	10,807	487	2,459	43,859
Apr.	22,414	11,751	10,663	3,250	684	483	164	384	4,121	4,663	8,536	482	1,585	35,015
May	26,667	12,979	13,688	2,600	585	717	189	489	3,624	4,455	12,006	599	2,588	41,540
June	27,894	14,706	13,188	3,502	831	1,046	195	430	4,187	4,667	10,644	833	1,653	41,176
July	24,809	16,192	8,617	4,487	680	955	218	533	4,719	5,244	10,516	411	1,142	37,522
Aug.	27,753	12,025	15,728	3,409	671	548	194	436	3,210	5,186	9,445	484	1,810	41,121
Sept.	29,425	12,913	16,512	4,758	745	766	218	533	3,364	4,913	10,628	764	2,140	45,341
Oct.	28,711	14,986	13,725	5,270	516	639	199	708	3,516	5,511	11,767	683	2,240	44,774
Nov.	31,648	14,904	16,744	3,980	1,044	838	186	411	4,657	6,349	11,958	991	2,620	49,778
Dec.	29,863	13,964	15,899	4,955	1,131	638	208	330	4,119	5,955	8,537	860	2,381	45,013
	316,825	158,022	158,803	45,684	10,082	8,460	2,308	5,378	46,643	62,678	119,271	7,881	25,307	492,495
1926:														
Jan.	30,452	10,237	20,433	4,058	1,273	416	196	288	4,397	6,277	8,081	915	1,284	47,618
Feb.	30,440	8,306	22,134	4,941	725	488	141	253	4,474	5,734	6,801	554	2,759	49,004
Mar.	35,012	14,800	20,212	5,708	1,113	792	232	418	4,865	5,612	11,880	573	2,126	53,531
Apr.	23,727	10,565	13,162	3,484	590	679	251	294	4,522	4,598	6,208	410	2,318	36,516
May	31,231	10,604	20,627	3,600	691	927	157	279	4,742	5,293	8,606	502	1,353	46,777
June	30,624	11,764	18,860	3,906	452	779	160	275	5,440	6,111	9,844	549	1,213	47,589
July	28,824	15,280	13,544	4,800					4,929	5,522	12,864	1,521		
Aug.	34,625	13,595	21,030									378		
Sept.														
Oct.														
Nov.														
Dec.														

(1) Malayan net exports cannot be taken as Malayan production since much of the imported rubber contains a high percentge of moisture and impurities which are eliminated before it is re-exported; the Malayan figures do not contain rubber exported as latex which on the basis of 3 pounds per gallon amounted to 99 tons in 1923, 957 tons in 1924 and 3,101 tons in 1925. (2) Ceylon Chamber of Commerce statistics until 1926. (3) Official statistics. (4) Figures for Sarawak, British North Borneo and Siam are imports from these territories into Singapore through which port practically their entire production moves. (5) Exports from "Other Dutch East Indies" are chiefly native rubber which contains one-third of moisture and impurities for which no allowance has been made in the statistics; rubber shipped as latex has not been included and amounted to 6,355 tons in 1923, 2,735 tons in 1924 and 6,207 tons in 11 months of 1925. (6) Exports through Para, Manaos and Iquitos. (7) This total includes the net exports from British Malaya and all the figures shown for the other territories.

Net Imports of Crude Rubber into Principal Manufacturing Countries

(Long Tons)

	United States	*United Kingdom*	*France* (abd)	*Germany*	*Canada* (ae)	*Japan* (ae)	*Italy*	*Russia* (ce)	*Australia* (cf)	*Belgium* (d)	*Netherlands*	*Sweden* (abcd)	*Norway* (abc)	*Denmark* (abd)
1919	236,977	42,671	19,951	5,584	8,770	10,688	9,894	75	733	3,995	2,771	2,022	437	673
1920	248,762	56,844	15,868	11,890	11,912	6,015	6,123	62	1,040	3,840	5,510	1,567	241	479
1921	179,678	42,087	16,981	21,920	8,248	22,981	3,906	165	554	1,705	1,022	813	178	251
1922	296,267	11,724	27,644	27,546	9,366	16,449	6,430	2,453	2,649	172	-3,807	1,248	321	87
1923	300,372	12,700	31,067	18,519	13,299	17,181	8,489	4,506	1,631	2,184	792	1,391	448	354
1924	317,747	-11,550	34,488	22,727	14,420	19,612	8,764	824	3,127	2,688	-807	1,781	669	473
1925	381,815	4,061	36,911	33,937	19,825	12,743	11,412	7,088	4,217	2,930	875	1,690	701	440
1925:														
January	31,736	-284	2,147	4,303	1,432	797	552	333	192	331	109	164	64	16
February	23,717	-2,492	3,529	3,690	1,278	658	908	1,000	338	275	88	136	145	37
March	31,727	-3,396	3,924	2,784	2,349	689	1,463	1,083	357	373	56	183	77	71
April	31,376	-2,961	3,069	3,574	1,397	719	817	535	314	97	181	149	47	23
May	35,729	-8,650	3,223	3,834	1,532	863	1,060	1,999	385	228	47	126	47	16
June	30,371	619	2,387	3,239	1,681	2,095	1,506	59	378	329	120	97	43	74
July	31,177	2,204	1,827	2,606	1,613	813	650	16	341	176	28	114	45	24
August	32,281	3,825	1,109	2,942	1,582	786	631	85	297	169	76	119	53	35
September	25,213	5,369	4,633	2,667	1,202	936	939	234	429	283	136	102	54	20
October	33,519	1,203	3,039	2,325	1,799	1,060	914	21	243	255	60	159	38	38
November	36,150	2,466	4,654	1,260	1,712	2,140	1,157	190	512	236	-12	219	55	52
December	38,819	6,158	3,370	713	2,248	1,187	815	1,533	431	178	-14	122	33	35
1926:														
January	40,320	6,439	3,170	703	2,188	892	760	332	358	76	154	123	46	51
February	31,435	3,114	3,518	1,113	1,685	741	1,041	643	432	275	89	171	82	94
March	40,316	8,907	4,790	1,342	2,079	864	1,037	832	369	129	227	213	31	55
Apr.	33,416	8,275	4,834	1,781	1,615		865	402		71	93	204	27	23
May	28,704	6,773	2,937	1,848	1,239			200			241	110	24	47
June	23,795	5,894	2,327	1,655	1,188			983			214	178		74
July	34,267	6,758		2,202				176				195		
Aug.														
Sept.														
Oct.														
Nov.														
Dec.														

a—Including gutta percha. b—Including balata. c—Reexports not deducted. d—Believed to include scrap and reclaimed rubber. e—Russian statistics are exports from United Kingdom only to Russia. f—Australian annual statistics including 1924 are exports to Australia from Malaya, Ceylon, Dutch East Indies and United Kingdom; monthly figures and total for 1925 are exports from Malaya, Ceylon, and Java only. -Minus sign, reexports in excess of imports. *All statistics from original official trade returns.*

The Market Place

4.

IF YOU need a light rubber for padding or shock absorbing, you should use RUBBER FOAM (in sheets).
Waterproof; will never rot; one-fourth the weight of cork. *Write for booklet.*
C/M Company of America
181 N. Dearborn St., Chicago, Ill.
EXCLUSIVE DISTRIBUTORS

RUBBER FACTORIES
use vast quantities of raw materials and equipment. Let the industry know how well you can serve it through a listing in this section.

TIRES
"Goes a long way to make friends"
General Tire & Rubber Co.
Akron, Ohio

RUBBER PRODUCTS
Sanitary Goods, Sheetings, Bathing Caps, Aprons, Rubber Specialties.
Sheet Gum Cut to Pattern
RANDPRINT RUBBER
Rand Rubber Co., Inc.
Sumner Ave. & Halsey St., Brooklyn, N. Y.

SANITARY GOODS—
Dress Shields, Baby Pants, Aprons, Elastic Belts, Bloomers, Stepins, Bibs, Guimps and Brassieres.
SPECIAL GOODS CUT TO ORDER
Rand Rubber Co., Inc.
Sumner Ave. & Halsey St., Brooklyn, N. Y.

TUBING, INSULATING and Straining Machinery
"Perfected" equipment for inner tubes, treads, and tire beads. Circular hose looms.
John Royle & Sons
Paterson, New Jersey

RUBBER PRODUCTS
Manufacturers of all classes of Rubber Goods.
United States Rubber Co.
1790 Broadway, New York City

STRIP CUTTING MACHINES
For cutting all rubber, composition and plain or impregnated fabrics.
Cameron Machine Co.
61 Poplar St., Brooklyn, N. Y.

USED MACHINERY
Mills, Calenders, Grinders, Washers
New and Old Rubber Scrap
Rubber Cloth Remnants
M. Norton & Co.
Locust St. Medford, Mass.

RUBBER SCRAP
Always Buying and Selling
Rubber Waste, Cured and Uncured, Hard Rubber, Balata, Gutta Percha.
HERMAN WEBER
Newark & Jackson Sts., Hoboken, N. J.

SULPHUR—*"Tire"* Brand Superfine; *"Tube"* Brand Velvet; quality Sulphur for the rubber trade.
Stauffer Chemical Co.,
of Texas.
Scanlon Bldg. Houston, Texas
San Francisco, Cal. Chauncey, N. Y.

WHITING—Domestic
RUBBER MAKERS STANDARD
Wm. S. Gray & Co.
342 Madison Ave., New York

RUBBER SUBSTITUTES
White, brown and black.
Carter Bell Mfg. Co.
150 Nassau St. New York

TECHNOLOGIST — Testing, formulæ, costs, experimental work on all classes of rubber products. Litigation.
Fred'k. J. Maywald, F.C.S.
5 William St., Belleville, N. J.

WHITING & PARIS WHITE
manufactured from *Genuine English Chalk* and *Cliffstone*—no adulterations.
Southwark Mfg. Co.
Camden New Jersey

SANITARY GOODS —
Dress Shields, Reducing Garments, Sheetings, Aprons, Bathing Caps, etc.
I. B. Kleinert Rubber Co.
485 Fifth Ave., N. Y. City

TIRES—For Every Transportation need from the Ford Runabout to the heaviest truck and Multiple passenger coach.
Fisk Rubber Co.
250 West 57th St., N. Y. City

ZINC OXIDES — Including KADOX and "Albalith."
The New Jersey Zinc Sales Company
New York Pittsburgh Chicago
Cleveland San Francisco

Buyers will see your products if they are listed in THE MARKET PLACE regularly, for they consult this section twice-every-month for their needs.

Daily Spot Closing Prices of Ribbed Smoked Sheet Rubber—*New York Market, in Cents per Pound*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
1924																																
Jan.	—	26¼	—	26½	26⅝	25¼	26⅝	26¼	26⅜	26¼	26⅛	26¼	—	25⅞	26¼	26	26⅛	25⅞	25½	25¼	25⅛	25¼	25⅛	24⅞	25⅜	25½	—	25⅜	25¼	25	25⅛	25⅝
Feb.	25⅝	25⅝	—	25⅛	25⅝	25¼	25⅜	25⅜	25⅝	—	25⅛	—	25½	25⅞	25⅝	25¼	25⅝	25⅞	25½	25⅛	—	25⅛	25⅛	—	25⅛	25⅛	25⅛	25⅛	25⅛	—	—	25¼
Mar.	25⅛	—	24⅜	24	24¼	24½	24¼	24¼	24¼	23⅜	23¼	22⅜	22½	22⅞	21¾	—	21	21¾	22⅛	22	21¾	21¾	21⅞	22⅜	22⅝	21¾	21¾	22⅛	22	22	—	22¼
Apr.	22⅛	22⅞	22	22	22⅛	22⅜	22⅜	22⅜	22¼	22¼	22¼	22¼	22¼	22⅜	22¼	—	—	22½	22⅜	22¼	22⅛	22⅜	23	23	23	23⅛	23⅛	23	22⅝	—	18¾	22⅞
May	22⅞	21⅞	22	—	21¾	21⅝	21⅝	21	21	21⅛	—	22¼	20⅝	19⅝	20	—	19	18	18⅜	17⅞	18	18⅜	18⅜	19	19⅛	18⅞	18⅞	18⅜	18⅜	—	19⅛	19⅛
June	18⅞	19⅛	19⅛	19⅜	19⅜	19½	19⅜	19⅜	19⅜	19⅜	19⅛	19⅛	—	—	—	18⅜	18⅜	18½	—	18⅜	18⅜	18⅜	18⅜	18½	18⅝	18⅝	18⅝	18⅝	—	18⅝	18⅝	18⅝
July	18⅝	19⅛	19⅛	—	—	—	—	—	—	20¾	21⅛	21½	—	21	—	21⅜	21⅜	—	21⅜	21⅛	—	22⅜	22⅜	22⅛	22⅛	22⅜	22⅜	22⅜	23⅜	23¼	23¼	23¼	22⅝
Aug.	23⅜	23⅝	—	24	25	25½	26⅛	26⅜	27	27⅛	26¾	26½	25¾	25⅝	26¼	26½	26½	26⅞	26½	26⅞	26⅞	26⅞	26⅞	26½	26⅞	26⅞	26⅞	26⅞	26⅞	26⅞	26⅞	26⅞
Sept.	—	26⅜	26½	26⅜	26⅜	26¼	26⅜	26⅜	26⅜	27¼	27¼	27⅜	27⅜	27⅜	27⅝	27⅝	27⅝	27⅝	27⅝	27⅞	28	28¼	28¼	27⅞	28	28¼	28¼	28¼	28⅜	28½	28⅜	27½
Oct.	28⅞	29½	29½	29⅜	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nov.	34⅜	34⅜	—	—	34⅞	34¼	34¼	34¼	34⅛	34⅞	34⅞	34⅞	—	31½	31½	30⅞	31½	31½	34	—	31¾	32¼	32⅜	32⅞	32⅞	32⅞	32⅞	32⅞	32⅜	32⅝	34⅜	31⅞
Dec.	35½	35⅝	36	36⅜	36⅞	37⅝	37⅝	38	37⅝	37⅞	37½	37½	—	34¼	34⅞	37⅞	37⅞	38	34	38⅜	38⅜	39⅛	38⅞	38⅞	38⅞	38⅞	38⅞	—	39⅜	39⅞	40⅛	37⅞
1925																																
Jan.	—	39⅞	39⅜	—	39	39	39¼	38⅝	38⅜	38⅞	—	37⅞	36½	36⅜	35⅞	35⅞	35⅜	35⅜	34⅞	34⅜	35	35⅛	36¼	36⅛	36⅛	35⅛	35⅛	35⅛	35	35⅞	36⅜
Feb.	—	35⅜	34⅞	34½	34½	34½	35⅜	35⅜	34¾	35¼	—	39⅜	35⅞	36	36⅞	36⅜	36⅜	36⅜	36¼	36⅜	36⅜	—	—	37⅛	37⅛	37⅜	38⅜	38⅜	—	—	36
Mar.	—	38⅜	38⅜	38⅞	38⅜	39⅜	39⅜	39⅜	40⅜	40¼	40⅜	—	40⅞	40⅜	40½	40½	41	41¼	41⅝	41⅝	41⅝	—	42½	43⅛	43⅞	43⅜	43⅜	43½	44⅛	42¾	41
Apr.	41¼	41⅞	41¾	41⅜	—	42⅛	42¼	43⅜	—	—	—	44⅛	44⅜	44⅜	44⅜	44⅜	44	44	44⅛	44	44⅛	44⅛	44⅛	44⅛	44⅛	44⅛	44⅛	44⅛	44⅞	—	—	43⅜
May	45	45⅞	—	47¼	46⅞	48⅜	50⅛	52½	55⅞	—	59	57	59¼	60⅜	60⅞	64¼	63	63	61⅜	61⅜	60⅞	61⅜	63	65	63	62⅞	63⅞	65⅞	—	—	—	58½
June	69½	72	74⅜	76½	75⅜	75⅜	—	74⅞	73⅜	—	—	74	74⅞	—	71⅞	71⅞	72⅝	73⅜	75½	76¼	76¼	79¼	83½	85⅜	82⅞	87	89⅞	89¾	82⅝	85⅝	93¾	77¼
July	81½	81⅞	85⅜	—	88⅜	88¼	90½	95⅛	94⅞	99⅞	106⅛	110⅞	110⅞	105⅜	110⅞	117	116¾	118⅞	—	121	117⅞	119	117⅞	112¼	117⅝	107⅞	107¾	96¾	93¼	93¼	103⅞
Aug.	94½	95½	95½	88⅜	86⅜	86⅜	81⅜	78¼	79	71⅞	72⅞	76½	81½	80¾	77¾	—	75¾	80½	80½	83½	82½	82½	82½	82½	85¼	85¼	85¼	87¼	90	83	88⅞
Sept.	88¼	85	85	81¼	81¼	—	97	97¼	99	98¾	99¾	—	92½	92¾	93½	93¾	92¾	92¾	93¼	94¼	92	93¼	93½	90	89	—	89¾	91¼	91½	88⅞
Oct.	91¼	91¼	92	94½	94½	97	100¼	—	109	109¼	106	105½	105½	101	99¼	90¼	93	88¼	86¾	—	88¼	90¼	88¼	88¾	—	89	98	99¾	101½	99¼	100¼	98
Nov.	—	99¾	—	98¾	98¼	100	—	108	—	109¼	105½	—	105½	—	99¼	90¼	93	88¼	—	88¼	90¼	99¼	99¼	99¼	—	108¼	108¾	—	107	—	104¾
Dec.	106¾	108½	107¾	107¾	108¾	—	108	109	109¼	106	105½	105½	—	101	99¼	90¼	93	88¼	86¾	—	88¼	90¼	88¼	88¾	—	91	—	93	91¼	91¼	98½
1926																																
Jan.	67	—	—	87	87¼	85½	86½	87½	87⅜	—	88¼	88¼	88¼	85⅛	84½	82½	—	75½	75½	75½	75	72	72½	—	68	66½	67	69¼	70½	69	—	79½
Feb.	67	67⅛	66¼	66⅜	68	69	—	—	67	65	66	66	65½	—	63	60½	60½	60	59	60	—	56	56	55	52	51¼	51	—	—	—	—	62½
Mar.	55	58	53	53½	53½	57½	56	56	55½	53	60	63	61½	61½	63	60½	61	62	61	60	61	61½	60	59½	60	—	59½	58½	58	—	59
Apr.	59	59	59	59	58	58	56½	56½	53	53	51½	50½	48¾	47½	48½	47½	47	47	47	47½	48	48	48	48½	48	48	48	48½	—	—	51¼
May	48¼	—	50¼	49¼	49¾	49¾	49½	49½	—	49	49½	49	48¾	47½	47½	47½	47	43	43	43	44	44	43½	43½	43	42	42	42	—	—	47½
June	41½	42	42	41½	41¾	—	41½	42	43	41¾	42	43	—	42	43½	43½	43	40	40	40	40	41	41½	41	41	41	41	42	42	—	—	42½
July	42	42	42	—	—	41½	41½	41½	41½	41½	41½	41½	41	—	42	40	40	40	39	39	39½	—	39	41½	41½	41	42	41	41	39	39	41¼
Aug.	—	38¾	38½	37	37	38¾	39	40¾	38¾	37¾	37½	37½	37½	38½	40	40	38	38	39	39	39½	—	39	39	39	39	39	39½	39½	40	—	38½
Sept.	40¼	40¾	40¾	—	—	—	40¾	40¼	40	40¾	40½	40½	—	40½	40¼	40¼	40½	40½	41	41	41½	41¾	42¼	42	42¾	42½	42	42½	42½	—	—	—
Oct.	43	43	—	43¼	42¾	42¾	42½	42½	42½	42½	42⅝	42⅝	42½	42⅝	43	43⅛	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nov.																																
Dec.																																

Automobile Production

	Passenger Cars			Trucks		
	Total	United States	Canada	Total	United States	Canada
1920	1,883,158	1,799,522	83,636	322,039	311,531	10,508
1921	1,514,000	1,452,902	61,098	147,550	142,402	5,148
1922	2,397,827	2,302,923	94,904	251,434	244,285	7,149
1923	3,719,164	3,589,936	129,228	378,288	361,078	17,210
1924						
January	293,824	283,983	9,841	30,785	29,038	1,747
February	343,460	331,388	12,072	32,974	31,295	1,679
March	357,045	341,851	15,194	36,505	34,466	2,040
April	346,405	331,957	14,448	38,037	36,104	1,933
May	286,324	271,033	15,291	35,408	33,655	1,753
June	225,079	214,322	10,757	29,135	28,185	950
July	244,544	235,925	8,619	26,448	25,341	1,107
August	255,232	249,796	5,436	28,714	27,834	880
September	263,528	256,940	6,588	32,015	30,663	1,351
October	260,881	254,524	6,357	32,533	31,263	1,270
November	204,343	198,381	5,962	27,956	26,875	1,081
December	182,099	174,899	7,200	27,596	25,906	1,690
Total	3,262,764	3,144,999	117,765	378,106	360,625	17,481
1925						
January	212,921	204,620	8,301	28,198	26,633	1,565
February	252,803	242,024	10,779	34,467	32,774	1,693
March	332,154	319,140	13,014	45,168	43,079	2,089
April	391,302	375,787	15,515	47,898	46,322	1,576
May	382,714	364,363	18,351	43,380	41,492	1,888
June	364,806	350,557	14,249	38,141	36,347	1,794
July	358,554	347,414	11,140	41,915	40,070	1,845
August	221,831	214,401	7,430	37,843	36,357	1,486
September	272,425	262,053	10,372	60,452	57,972	2,480
October	406,572	392,651	13,921	46,003	44,309	1,694
November	336,358	327,617	8,741	40,077	37,840	2,237
December	285,199	277,701	7,493	34,477	32,746	1,731
Total	3,817,639	3,678,328	139,311	498,019	475,941	22,078
1926*						
January	284,703	272,922	11,781	33,461	29,763	3,698
February	334,524	319,763	14,761	41,685	37,608	4,077
March	399,105	381,116	17,989	49,233	44,848	4,385
April	401,836	383,907	17,929	53,887	50,314	3,573
May	394,569	373,140	21,429	51,343	47,838	3,505
June	358,360	339,542	18,818	47,043	44,110	2,933
July	328,816	315,863	12,953	41,847	39,592	2,255
August	——	379,111	——	——	45,283	——
September						
October						
November						
December						

*Revised Figures

U. S. Consumption of Crude Rubber

(Rubber Association of America statistics raised to 100 per cent—All figures in long tons)

	1921	1922	1923	1924	1925	1926
January	5,045	16,938	30,106	29,058	29,638	32,196
February	5,955	14,767	30,149	25,736	29,761	31,136
March	9,190	21,408	36,629	28,385	33,498	32,936
April	13,084	19,294	29,085	27,129	34,139	32,696
May	16,023	23,246	36,155	25,845	35,322	29,364
June	16,142	31,713	24,272	22,753	35,822	28,598
July	18,310	24,522	17,685	23,396	36,053	27,577
August	23,649	29,361	20,259	28,962	35,909	34,444
September	16,705	24,410	17,594	31,497	31,691	32,904
October	16,814	26,881	21,321	31,520	29,047	
November	14,105	24,950	20,437	27,289	28,853	
December	15,482	25,070	21,902	27,199	28,748	
TOTALS	170,504	282,560	305,694	328,769	388,481	

Monthly statistics covering shipments of various classes of rubber goods from the United States may be secured free of charge from the Rubber Division, Bureau of Foreign & Domestic Commerce, Washington, D.C.

EDITOR'S REVIEW DESK

Books **Trade Catalogs** **Articles**

EXPORT TRADE IN RUBBER FOOTWEAR. 1925. Trade information Bulletin No. 435. By E. G. Holt, Chief of the Rubber Division. 31 pp. 5¾ x 9″. Department of Commerce, Washington, D. C.

Superseding Trade information Bulletin No. 218, issued in 1924, this phamphlet contains current statistical information on the international trade in rubber footwear, soles and heels. It deals largely with the exports from this country, but also treats the rubber footwear export trade of Canada, the United Kingdom, Germany, France, Austria and Sweden. It is shown that Canada has gained more rapidly than any other country in this branch of the export business, but the United States still maintains a position of leadership in quantity and value of exports of rubber footwear, heels and soles. This is indicated by the fact that this country exported 7,295,000 pairs of rubber boots and shoes in 1925, an increase of 2,785,000 pairs since 1922. The value of the 1925 exports was nearly $7,000,000.

One class of trade in which the United States does not share, however, is that of low-priced, even if inferior products, for which there is apparently a considerable demand. The author doubts whether it would be desirable for American manufacturers to attempt competition in cheaper lines since the profit from such lines would be small owing to the high labor costs in this country as compared with those in France, Germany and Austria. The possible volume of domestic sales of cheap rubber shoes would be a strong factor in determining the desirability of producing such lines, as American manufacturers seldom consider making lines solely for export.

* * *

GRASSELERATOR 808. 12 pp. 3 1-4 x 6 1-4″. Grasselli Chemical Company, 347 Madison Ave., New York.

This little booklet describes a vulcanization accelerator the Grasselli Chemical Company has christened Grasselerator 808. The active ingredient is an aldehyde-amine condensation product, said to be entirely different from any other. The accelerator is claimed to provide the minimum cost of accelerator per pound of rubber and the desired reduction in time and temperature of curing; it is also said to permit reduction of sulphur and activating ingredients.

Easily incorporated in the batch at any period of mixing, 808 does not require special preparation or handling. It is a transparent, mobile, amber liquid, miscible with all the common rubber solvents. Reduction of the size of the batch and extra precautions with cooling water are said to be necessary. The accelerator becomes active above 230° F. and is fully efficient at 248° F.

Five charts demonstrate the advantages claimed for 808, and ageing results obtained on optimum cure of 30 minutes at 284° F. are given. Two formulae printed in the booklet show that the accelerator may be used with large percentages of reclaimed rubber.

* * *

CHEMICAL ENGINEERING CATALOG. 1926. Eleventh Annual Edition. 1175 pp. 8¾″x11¾″. The Chemical Catalog Company, Inc., New York.

This weighty and comprehensive volume is published annually under the supervision of an official committee appointed by the American Institute of Chemical Engineers, the American Chemical Society and the Society of Chemical Industry. The present edition was issued under the supervision of the following committee: E. R. Weidlein, chairman; William M. Grosvenor, William Hoskins, M. C. Whitaker and ex-officio members Hugh K. Moore, president, American Institute of Chemical Engineers; James F. Norris, president, American Chemical Society; and L. V. Redman, chairman, American Section, Society of Chemical Industry.

The classified list of equipment and materials occupies the greater part of the book. Indices to firms using catalog space and products listed under various headings are provided to help users of the volume in finding the material desired. Announcements of the companies using the catalog as an advertising medium follow, but as all these are of uniform appearance and typography and are arranged alphabetically, there is little to identify them as advertisements.

More than 2,000 books are listed and described in the Technical and Scientific Books Section. A subject index provides those desiring special information on any particular topic with a means of finding the book or books relating to it without thumbing through the entire main list of authors' names. The book section includes a list of American Chemical Society Monographs, both published and in preparation.

The catalog is leased at $2.00 a copy for the period of one year to chemical engineers, chief chemists, technical Government departments, heads of chemical departments in universities and other educational institutions and certain other classes. To others not included in the classification a charge of $10.00 a copy is made for the volume, with the understanding in either case that upon publication of the succeeding volume the issue is subject to recall.

* * *

AUTOMOTIVE EQUIPMENT AND CONSTRUCTION PREFERENCES IN FOREIGN COUNTRIES. Trade Information Bulletin No. 431. By H. C. Schuette, Automotive Division, Department of Commerce. Government Printing Office, Washington, D. C. $0.10.

Based on replies to a questionnaire sent to consular officers and agents of the U.S. Department of Commerce in practically every market of the world, this report is a study of the preferences in various foreign markets for different kinds of automobiles and automotive equipment. As there is a marked variance in preferences, American sales abroad would undoubtedly be further increased if more attention was paid to the likes and dislikes of the various countries. The object of the report is to aid the manufacturer by pointing out these preferences, but the report should also serve as a guide to the exporter in providing information as to special equipment.

* * *

RUBBER TODAY. By William O'Neil, president, the General Tire & Rubber Co. Published by the Industrial Digest for October.

Synthetic rubber is too remote a possibility to be reckoned with. Guayule, a shrub rubber of low grade, is in an experimental stage as a producer of rubber, and the results are still problematical. Last year the output of American rubber manufacturers aggregated over a billion dollars, the greater part of which represented tire manufacture. With these contentions as facts, the American rubber market must face realities and appreciate that there is no near relief from the Middle East rubber monopoly. Climatic and labor advantages of Malaya hove given it first place in rubber production, and that colony will continue for at least a generation to give us high-grade rubber at the lowest price.

In this manner, the author sums up the rubber situation. Although stressing the fact that guayule is nothing more than a vague promise at present, he finds in the experiments of the Continental Rubber Company a hope which points toward a measure of relief. Guayule can be prepared for the market to sell at 25 cents a pound, after three years. The drawback in the use of this shrub, is the fact that it must be cut down and the rubber mechanically extracted, whereas hevea, a strong tree, stands tapping for many years without deterioration.

BOOKS Every Rubber Man Should Read

POTTS, HAROLD E. The Chemistry of the Rubber Industry. 163 p. $2.50

Contents: The Colloidal State. Suspensoid Colloids. Emulsoid Colloids. Raw Rubber. Gutta-Percha and Balata. Mixing. Control. Compounding Ingredients. Vulcanization.

SCHIDROWITZ, P. Recent Progress in Rubber Chemistry and Technology. 64 p. $1.25

A brief but interestingly written treatise giving actual facts in connection with the progress in rubber chemistry.

Contents: Plantation rubber; Mechanics of vulcanization; The rubber manufacturing industry; Mixing ingredients (Fillers, etc); Properties of vulcanized rubber.

SCHIDROWITZ, P. Rubber. Its Production and Industrial Uses. 320 p. $6.00

Contents: Historical. Production and consumption of rubber. Wild rubber. Plantation industry. Crude rubbers compared—Tackiness. Chemistry of crude rubber. Theory of vulcanization. Manufacture of rubber goods. Substitutes and waste rubber disposal. Chemical, physical, and mechanical properties of vulcanized rubber. Chemical analysis and physical examination of rubber. Mechanical tests. Contracts.

SEELIGMANN, T., TORRILHON, G.L., and FALCONNET, H. India Rubber and Gutta Percha. Translated by J. G. McIntosh. 424 p. $6.00

A complete practical treatise on india rubber and gutta percha in their historical, botanical, arhoricultural, mechanical, chemical and electrical aspects.

SIMMONS, H.E. Rubber Manufacture. 156 p. $4.50

The cultivation, chemistry, testing and manufacture of rubber, with sections on reclamation of rubber and the manufacture of rubber substitutes. The entire rubber industry is completely discussed and the technical features of the subject presented so as to be of value to students and manufacturers.

STEVENS, H.P., and BEADLE, CLAYTON. Rubber Production and Utilization of the Raw Product. 138 p. $1.00

Contents: The Para rubber tree and rubber latex; Other rubber-yielding trees; Manufacturing processes; Preliminary treatment; Compounding and mixing; Ingredients and mixing; Vulcanization; Mechanicals; Rubber solution and its application; Cut sheet; Cold curing of India rubber; Miscellaneous rubber goods; Vulcanite; Direct utilization of rubber latex.

TERRY, H. L. India Rubber and Its Manufacture. With chapters on gutta-percha and balata. 294 p. $3.00

Contents: Historical and general raw rubber; Chemical and physical properties; Vulcanization; India-rubber plantations: India-rubber substitutes; Reclaimed rubber; Washing and drying of raw rubber; Compounding of rubber; Rubber solvents and their recovery; Rubber solution; Elastic thread; Mechanical rubber goods; Sundry rubber articles; India-rubber proofed textures; Tires; India-rubber boots and shoes; rubber for insulated wires; Vulcanite contracts for india-rubber goods; The testing of rubber goods; Gutta-percha; Balata; Bibliography.

TUTTLE, JOHN B. The Analysis of Rubber. 155 p. $2.50

Contents: The purpose of rubber analysis; Composition of crude rubber; Preparation of rubber compounds; Theory of Vulcanization; Sampling; Extractions; Determination of rubber; Sulphur determinations; Detection of organic accelerators; Mineral analysis; Microsectioning and Microphotography; Calculation to approximate formulas.

WEBER, LOTHAR E. The Chemistry of Rubber Manufacture. New Edition. 372 p. $9.00

Contents: Composition of Latex; Preparation of Crude Rubber; Coagulation; Composition and Properties of Crude Rubber; Vulcanization; Synthesis; Examination of Crude Rubber; Inorganic Compounding Ingredients; Reinforcing Agents; Sulphur; Organic Compounding Ingredients; Softeners; Organic Accelerators; Reclaimed Rubber; Chemical and Physical Examination of Vulcanized Rubber. APPENDIX: Rubber Solvents; Textiles. Index.

WHITBY, G.S. Plantation Rubber and the Testing of Rubber. 549 p. $9.50

Contents: The preparation of plantation rubber; The rubber tree and the extraction of latex; Latex and its coagulation; Crepe; Sheet; Maturation; Variation; The Testing of Rubbers. Comparison of raw rubber samples; Stability of state of cure; Viscosity determinations; Cycles of extension and retraction—Hysteresis; Elastic after-effect; Poisson's ratio; Bibliography.

Send orders to

BOOK DEPARTMENT
THE RUBBER AGE,
225 Fourth Ave., N. Y. City

INDEX TO ADVERTISERS

A

Adamson Machine Co. 96
Akron Equipment Co. 94
Akron Rubber Mold & Machine Co. 94
Akron Standard Mold Co., The 55-94
American Cyanamid Co. 96

B

Banner Machine Co., The 96
Binney & Smith Co. ..... Back Cover-92
Bullock & Sons, Inc., E. L. 94

C

Cabot, Inc., Godfrey L. 86-92
Cameron Machine Co. 98
Carrier Engineering Corp. 96
Carter-Bell Manufacturing Co., The 88-98
Cleveland Equipment & Engineering Co. 74-94
C/M Company of America 96
Colledge, E. W. 74-94
Continental Rubber Co. 96

D

Damascus Mnfg. Co. 88-96
Defiance Rubber Co. 74-94
Dovan Chemical Corp. 88-92
du Pont de Nemours & Co., E. I. 57-92

F

Fisk Rubber Co. 98

G

General Tire & Rubber Co. 74-98
Gibraltar Rubber Corp. 96
Grasselli Chemical Co. 92
Gray & Co., Wm. S. 88-98

H

Hall Co., The C. P. 58-94
Harshaw, Fuller & Goodwin Co. 88-94
Henderson Brothers Co., Inc. 81-96
Henderson, Helm & Co., Inc. 81-96
Huber, J. M., Inc. 70-92

I

International Pulp Co. 71-92

J

Jones, H. Frank 96

K

Kleinert Rubber Co., I. B. 98
Kuhlke Machine Co. 74-94

L

Lane, J. H. & Co. 91-96
Lawrence & Co. 90-96
Lowe Co., The Clyde E. 94

M

Maywald, Fred'k. J. 98
McNulty, Joseph A. 94
Moore & Munger 92
Muehlstein & Co., Inc., H. 94-96

N

National Standard Co. 74-92
Naugatuck Chemical Co. 68-96
New Jersey Zinc Sales Co. 98
Norton & Co., M. 98

P

Pequanoc Rubber Co. 94
Philadelphia Rubber Works Co. 69-94

R

Rand Rubber Co., Inc. 72-98
Rare Metal Products Co. 92
Roessler & Hasslacher Chemical Co., The 54-92
Royle & Sons, John 72-98
Rubber Regenerating Co. 94
Rubber Service Laboratories Co., The 92

S

Southwark Mfg. Co 98
Spadone Machine Co. 92
Stamford Rubber Supply Co. 96
Stauffer Chemical Co. 98
Stocker, F. William 94

T

Textile Finishing Machine Co., The 72-92

U

U. S. Rubber Co. 98-102
U. S. Rubber Reclaiming Co. 94

V

Vanderbilt, R. T., Co. ..... Front Cover-96

W

Weber, Herman 98
Williams Foundry & Machine Co., The 72-94
Wilson Co., C. T. 81-96
Wishnick Tumpeer, Inc. 96-103

X

Xylos Rubber Co., The 94

The Market Place 92-94-96-98

TRADE

MARK

United States Rubber Company

MAIN OFFICE:

1790 Broadway, New York

Fifty-Three Factories
Branches in all Principal Cities

Manufacturers of All Classes of Rubber Goods, including—

"U. S." ROYAL CORD AND USCO BALLOON TIRES
"U. S." ROYAL CORD AND USCO CORD TIRES
"U. S." ROYAL CORD MOTORCYCLE BALLOON TIRES
"U. S." ROYAL CORD MOTORCOACH TIRES
"U. S." ROYAL CORD HEAVY SERVICE TIRES
"U. S." HEAVY DUTY CUSHION, CUSHION, and
HIGH SIZE CUSHION SOLID TRUCK TIRES
"U. S." ROYAL, GREY, AND USCO TUBES
"U. S." BICYCLE TIRES, REPAIR MATERIALS, AND ACCESSORIES
"U.S." AUTO TOP MATERIALS "U. S." SPRING-STEP RUBBER HEELS USKIDE SOLES
"U. S." RUBBER FOOTWEAR KEDS SNUG-LER FELT FOOTWEAR
"U. S." RAYNSTER RAINCOATS BELTING—PACKING—HOSE HARD RUBBER PRODUCTS
"U. S." TILE FLOORING USCO SHEET FLOORING NAUGAHYDE LUGGAGE
"U. S." ROYAL GOLF BALLS "U. S." DRUGGIST SUNDRIES
"U. S." PARACORE INSULATED WIRE AND CABLE
"U. S." BATHING APPAREL

United States Rubber Export Co., Ltd.

Exporters of the Products of

United States Rubber Company

AND

Dominion Rubber Company, Limited

MAIN OFFICE:

1790 Broadway, New York, U. S. A.

Branches and Distributing Agencies in all leading cities of the World

"The House of WITCO the Complete Line"

WHITING MAGNESIA

F. E. SCHUNDLER
Joliet, Ill. Jersey City, N. J.

CLAY

SOUTH CAROLINA CLAY CO.
Langley, S. C.

Specially processed for finest class of rubber mixing

As exclusive distributing agents and supported by our Rubber Laboratory —

We Offer: PRICE
SERVICE
QUALITY

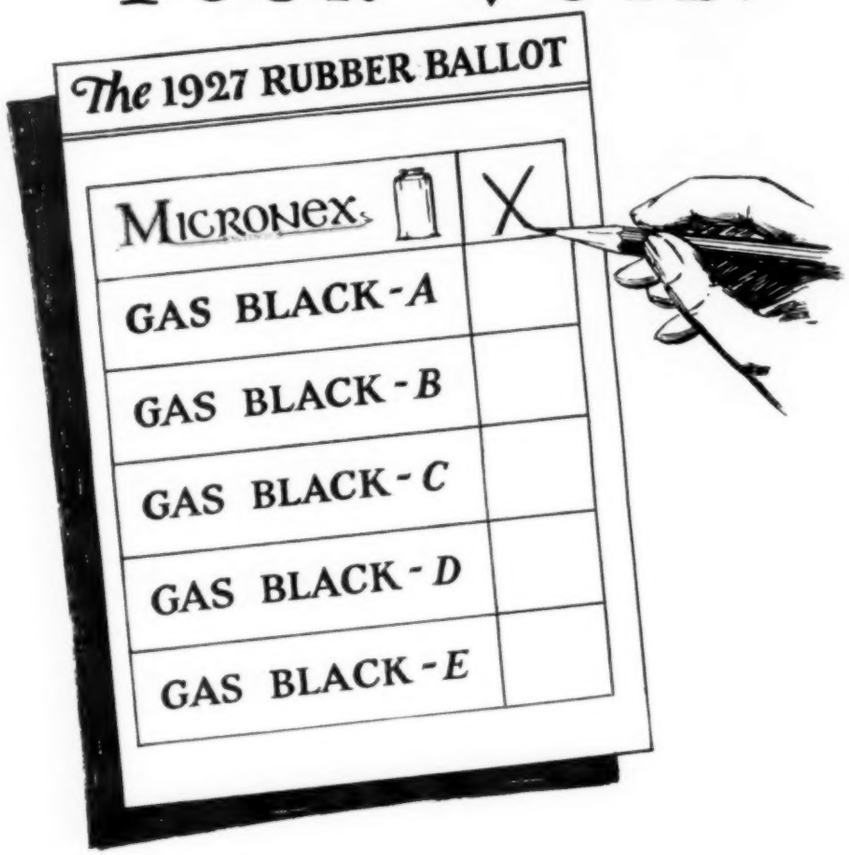
We are now booking 1927 contracts
Let us figure on your requirements

Aluminum Filler
Aniline Oil
Antimony
Asbestol Filler
Barytes
Blacks (Misc.)
Blanc Fixe
Blues (Misc.)
Browns (Misc.)
Carbon Tetrachloride
Carbon Bisulphide
Carbon Black
Caustic Soda
Clays
Chromium Oxide
Diphenylguanidine
Fossil Flour
Gilsonite
Glycerine
Green (Misc.)
Hydro Carbon
Infusorial Earth
Indian Red
Lamp Black
Lead Oleate
Lime
Litharge
Lead—Red
Lithopone
Magnesia
Mica
Montan Wax
Ochre
Palm Oil
Paraffin
Petrolatum
Pine Tar
Pine Pitch
Pitch—Burgundy
Reds (Misc.)
Red Oxide
Rosin
Rosin Oil
Rubberite Compound
Soap Bark
Soapstone
Starch-Corn
Stearic Acid
Sulphur
Sulphur Chloride
Talc
Thiocarbanilid
Titanium White
Ultramarine Blue
Vermilion
Venetian Red
White Lead
Whites (Misc.)
Whiting
Wood Flour
Yellows (Misc.)
Zinc Oxide

Wishnick-Tumpeer, Inc.

NEW YORK 251 Front St.
CHICAGO 365 E. Illinois St.
CLEVELAND Davenport & E. 14th. St.
BOSTON 185 Devonshire St.

YOUR VOTE!



By selecting Micronex you automatically elect to use something MORE than just gas black.

Unparalleled Resources, Control, Suitability, Uniformity and Service make

MICRONEX

REG. U.S. PAT. OFF.

The World's Standard Gas Black

Binney & Smith Co
41 E. 42nd Street-New York City

Agents with stocks located in Boston, Cleveland, Akron, Cincinnati, Chicago, San Francisco, Los Angeles, Toronto and Montreal